ANNUAL REPORT

of the

Health Department

of the

City of Dundee

for the year 1970

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B.S.c., M.B., Ch.B., D.P.H., D.P.A.

MEDICAL OFFICER OF HEALTH

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CITY OF DUNDEE

Report of the Medical Officer of Health

FOR THE YEAR ENDING
DECEMBER 1970

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Senior Medical Officers in Department:

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Dr. HELEN W. GREENLEES, M.B., Ch.B., D.P.H.
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Dr. ANNE LANGLANDS, M.B., Ch.B. (Part-Time)
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Dr. JOHN KNIGHT, M.B., Ch.B., C.I.H.
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Dr. SHEILA BROWN, M.B., Ch.B.
Dr. MARGARET MILROY, M.B., Ch.B. (Part-Time)

Dental Services:

NORMAN A. WALKER, L.D.S.(St. A.)	Chief Dental Officer
ISOBEL S. McGLYNN, L.D.S., D.P.D.(St. A.)	Dental Officer
JAMES M. CLARK, L.D.S.(St. A.)	Dental Officer
JOHN H. QUIN, L.D.S., R.C.S.(Ed.)	Dental Officer
DAVID EWING, L.D.S., B.DS.(St.A.)	Dental Officer
ROBERT S. TAYLOR, L.D.S.(St.A.)	Dental Officer
A. GRAHAM GRAY, L.D.S., B.D.S.(St.A.)	Dental Officer
IAN D. MUIR, L.D.S., R.C.S.(Ed.)	Dental Officer
JAMES D. McGRAIL, L.D.S., R.C.S.(Ed.)	Dental Officer
CATHERINE GRAY, B.D.S.(Glas.)	Dental Officer

Administrative Assistant (lay)	Mr STEWART B. ORAM
Superintendent of Health Visitors	Miss MARGARET M. COLLINS
Superintendent of Midwives	Miss JOAN CLARK
Audiometrician	Miss ALICE FLYNN
Chief Chiropodist	Mr JOHN RUSSELL

Sanitary Department:

JOHN FOREMAN, F.R.S.H., M.R.San.A.(S)	Chief Sanitary Inspector
JAMES F. FARQUHARSON, M.R.San.A.(S)	Deputy Chief Sanitary Inspector

Public Analyst's Department:

RONALD S. NICOLSON, A.R.I.C., Public Analyst

Staff as at 31.12.70

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Summary of Vital Statistics for 1970 as compared with 1969

	1969	1970
Population	181,950	181,508
Number of Deaths (corrected)	2,244	2,142
Death-rate per 1,000 population	12.3	11.8
Deaths of Infants under 1 year	62	40
Infantile Death-rate per 1,000 births	20	14
Marriage-rate per 1,000 population	9.3	8.8
Number of Births Registered (corrected)	3,066	2,921
Birth-rate per 1,000 population	16.9	16.1
Illegitimate Birth-rate per 100 births	10.1	10.3
Stillbirths per 1,000 births (including stillbirths) ...	9	12
Number of Deaths from Pulmonary Tuberculosis ...	2	4
Number of Deaths from all forms of Tuberculosis ...	4	8
Death-rate per 1,000 population from Pulmonary Tuberculosis	0.01	0.02
Death-rate from all forms of Tuberculosis	0.02	0.04
Death-rate from Principal Epidemic Diseases	0.04	0.13
Deaths from Diphtheria	—	—
Maternal Mortality per 1,000 births	0.3	—
Neonatal Mortality	13	10
Number of Deaths from Malignant Diseases	513	467
Death-rate from Malignant Diseases	2.82	2.57

Annual Report, 1970

The Lord Provost, Magistrates and
Town Councillors of the City of Dundee.

Ladies and Gentlemen,

I have pleasure in presenting my Annual Report on the work of the Health Department for the year 1970. This year saw the implementation of the Social Work (Scotland) Act and the setting up of the new Social Work Department. This new Department took over the former Welfare Services and this has allowed the Health Department to extend operations in the field of preventive medicine.

Statistical tables contained in the text of this Annual Report will show that the health of the city is being maintained at a satisfactory level. This is illustrated in no small manner by the fact that 1970 saw the lowest infant mortality rate ever recorded in this city. This is a tribute to all those engaged in the full range of medical services.

Planning continued to go ahead during the year for placing all medical records on to computer tapes and the benefits of this will be enormous in ensuing years.

1970 has been a year of change in the Health Department and the target for 1971 will be a progressive programme of bringing attention of the citizens of Dundee to the services offered by the Health Department.

Vital Statistics: From an examination of the statistics on the opposite page, it will be seen that the year under review has been a healthy one. The number of infant deaths—40—is the lowest ever recorded.

Population: The population of the City as estimated by the Registrar General at the middle of 1970 was 181,508—a decrease of 442 over the previous year. The natural increase of population—the increase of births over deaths—is 779.

Deaths: The number of deaths corrected for transfers during 1970 was 2,142 compared with 2,244 in 1969. The respective rates per 1,000 population were 11.8 and 12.3. The figures for Aberdeen, Edinburgh and Glasgow are 11.7, 12.9 and 13.2 respectively.

The average age at death during 1970 was 68, which is the same as in 1969. The proportional mortality ratio which is the number of deaths at the age of 50 years and over expressed as a percentage of the total number of deaths in the population was 89.4 per cent. In 1969 this figure was 89.5 per cent.

Eight deaths were attributed to tuberculosis this year compared to four last year.

Deaths from respiratory conditions increased from 250 in 1969 to 288. There were 22 deaths from Influenza during the year—7 in 1969. The principal causes of all deaths, diseases of the heart and circulation accounted for 1,041 deaths of which 579 were due to ischaemic heart disease and 256 to cerebrovascular disease.

The number of malignant deaths—467—shows a decrease of 46 compared with the 1969 figure of 513. Cancer of the lung accounted for 130 of these (100 males and 30 females).

Deaths from unnatural causes remain high—accidents in the home 27 (41), motor vehicle accidents 24 (35) and suicides 35 (13). The 1969 figures are shown in brackets.

Infant Deaths: The 1970 figure of 14 per 1,000 births is the lowest ever recorded for this City. The undernoted table gives an indication of the progressive reduction in the number of infant deaths over the years.

Year	No. of live Births	Total Infant Deaths	Infant Death Rate (per 1,000 live births)
1970	2,921	40	14
1960	3,744	82	22
1950	3,171	158	50
1940	2,872	192	67
1930	3,506	397	113
1920	5,047	661	131
1910	4,472	750	168
1900	4,716	836	177

Stillbirths: There were 34 stillbirths (corrected for transfer) compared with 28 in 1969. A fuller report on the Infant Deaths and Stillbirths is contained in the Maternity and Child Welfare Section.

Maternal Deaths: There were no maternal deaths in 1970. In 1969 there was 1 maternal death.

Births: There were 2,921 births (corrected for transfer) compared with 3,066 in 1969. The 1970 birth rate per 1,000 population was 16.1, in 1969 it was 16.9.

Illegitimate Births: In 1970 there were 301 illegitimate births, representing a rate of 10.3 per 100 live births, which is slightly higher than the 1969 figure of 10.1.

Smallpox Vaccinations: The number of primary vaccinations during 1970 increased from 1,792 to 1,852. 30 children under the age of one year were vaccinated, in 1969 the number was 45. In addition, 1,818 persons were re-vaccinated compared with 1,545 in 1969. No special clinics were held this year, but vaccination was offered routinely at Child Welfare Clinics and by general medical practitioners.

Diphtheria, Tetanus and Whooping Cough Immunisation: During the year, immunisation records were received in respect of the undernoted young children who completed the full course of immunisation.

Tetanus	13
Diphtheria and Tetanus	20
Diphtheria, Tetanus and Whooping Cough	2,389
Pertussis	3

Measles Vaccination: 1,858 children were immunised this year compared to 1,216 in 1969. Records received from all sources are as follows:—

Children born in 1970	—
Children born in 1969	483
Children born in 1968	362
Children born in 1967	200
Children born in 1966	145
Children born in 1965	173
Children born in 1964	148
Children born in 1963 and earlier ...	347
	1,858

Poliomyelitis Immunisation: The record of persons receiving a full basic course of immunisation during the year is as follows:—

Children born in 1970	408
Children born in 1969	1,518
Children born in 1968	210
Children born in 1967	36
Children born in 1966	18
Children born in 1965	9
Children born in 1964	2
Others	33
	2,234

Parents continue to be advised by the district health visitors and by press advertisement of the importance of ensuring that their families are completely protected from this disease.

B.C.G. Vaccination: During the year 18 schools were visited, and the following figures include nurses, medical students, contacts, newborn babies and others, as well as school children.

	Tuberculin Tested			Negative Reactors			Vaccinated		
	M.	F.	Total	M.	F.	Total	M.	F.	Total
1970	3323	3460	6783	2004	2031	4035	1822	1733	3555
1969	2712	2848	5560	1376	1461	2837	1245	1333	2578

Venereal Diseases: The following details of new cases during the year have been supplied by the Medical Officer of the Treatment Centre:—

	Syphilis			Chancroid	Gonorrhoea					
	Acquired	Congenital	Total		Genital	Gonoccocal Ophthalmia	Total	Ven. Cond. other than Syphilis Gonorrhoea and Chancroid	Total Venereal	Non-Venereal
1970 ...	5	—	5	—	332	—	332	894	1231	268
1969 ...	2	—	2	—	237	1	238	687	927	226
1968 ...	2	—	2	—	242	—	242	588	832	205

Information about the Treatment Centre is usually displayed on notices placed in public lavatories. When requested, health visitors assist in following up suspected sources of infection and new suspected cases. In the Port Health work of the Department, special emphasis is paid to the passing of information about traeatment facilities to the master of incoming ships.

Tuberculosis: The number of cases confirmed to be suffering from active respiratory tuberculosis was 64, 36 males and 28 females. Last year's figure was 101, 62 males and 39 females.

The non-respiratory cases confirmed this year numbered 14, 4 males and 10 females. Last year's figure was 21, 7 males and 14 females. The site of disease in this year's non-respiratory cases included 3 miliary, 3 bones and joints, 6 with superficial glands affected and 2 genito-urinary.

There were 8 T.B. deaths during the year, 4 pulmonary and 4 due to other forms of tuberculosis including late effects. The average age of death is 68 years.

The number of known cases of respiratory tuberculosis at the end of the year was 1,232. Details in sex and age groups are as follows:—

Sex	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and over	Total
M.	—	—	28	31	75	146	148	131	114	673
F.	—	1	31	37	84	152	129	71	54	559

During the year, 27 cases of tuberculosis (12 of which were new cases), who were certified by Medical Officer to be in need of extra nourishment, were granted additional milk.

Home Nursing: The Dundee Sick Nursing Society and the Broughty Ferry Nursing Association continued their important work on behalf of the Local Authority.

A detailed abstract of the work is as follows:—

Home Nursing:	New Cases Notified During the Years 1970	1969	1968	1967	1966	1965	1964
Patients under 65 years ...	908	848	919	749	901	1105	1293
Patients over 65 years ...	1326	1148	1034	1009	1097	1111	1145
	2234	1996	1953	1758	1998	2216	2438

1. Cases under treatment at 31st December, 1969	845
New cases reported during 1970	2,234
	3,079
Cases removed from register during the year:—	
(a) Convalescent	1,392
(b) Removed to hospital	568
(c) Transferred	—
(d) Died	157
Total number of cases on register at 31st December, 1970	962

2. Total number of nursing visits during the year 1970 77,254

3. Details of new cases registered during the year 1970:—

(a) Nature of Treatment required:—

	Total	Age Grouping 0-4	5-15	16-64	65+
General Cases	343	—	—	73	270
Dressings	686	34	34	298	320
Blanket Baths	205	1	—	32	172
Enemas	228	8	13	72	135
Penicillin injections	233	8	15	139	71
Insulin injections	15	—	—	3	12
Other injections	371	3	—	143	225
Other treatment	153	6	3	23	121
	2,234	60	65	783	1,326

(b) Main Conditions and Age Groupings of New Cases:

		Total	0-4	5-15	16-64	65+
1.	Tuberculosis	14	—	—	8	6
2.	Other Infectious diseases	26	1	1	7	17
3.	Malignant and lymphatic neoplasm	212	1	—	91	120
4.	Asthma	5	—	1	3	1
5.	Diabetes Mellitus	42	—	—	14	28
6.	Vascular Disease	101	1	1	11	88
7.	Mental and Nervous diseases	117	—	—	75	42
8.	Diseases of heart and arteries	138	—	—	28	110
9.	Diseases of the veins	88	—	—	25	63
10.	Upper respiratory diseases	44	2	2	33	7
11.	Other respiratory diseases	156	2	4	65	85
12.	Constipation	187	8	12	50	117
13.	Other diseases of digestive system	156	4	13	73	66
14.	Diseases of urinary system and male genital organs	34	1	1	13	19
15.	Diseases of breast and female genital organs	53	—	—	37	16
16.	Diseases of skin and sub-cutaneous tissues	136	7	12	58	59
17.	Diseases of bones, joints and muscles	89	—	—	29	60
18.	Injuries	237	25	16	82	114
19.	Senility	92	—	—	—	92
20.	Other conditions	307	8	2	81	216
		2,234	60	65	783	1,326

4. Nursing requisites issued during year:—

1 Walking Aid
8 Back Rests
9 Cages
1 Tripod

4 Air Rings
13 Bed Pans
18 Commodes
12 Urinals

3 Wheelchairs
1 Sani Chair

5. Staffing:—

	Average
Superintendent	1
Nurses (whole-time)	28
Nurses (part-time)	1

Nursing Equipment: as supplied by the Health Department.

Bedpans	61	Air Rings	32
Rubber Sheets	55	Nappie Rolls	882 (60 patients)
Fracture Boards	16	Wheelchairs	24
Urinals	34	Bed Cages	36
Bed Rests	48	Plastic Incontinence Pants	124
Pillow Cases	16		
Pillows	8	Sani Chair	1
Beds	2	Lifting Machine	1
Mattresses	2		
Commodes	119	Sputum Bottle	1

Welfare Foods: The sale of National Dried Milk continues to fall, but there is an increase in the sale of Vitamin Tablets, Cod Liver Oil and Orange Juice. Details are as undernoted:—

	National Dried Milk	Orange Juice	Cod Liver Oil	Vitamins
1967	18,115	56,127	5,008	3,444
1968	9,794	47,693	3,979	2,796
1969	7,052	57,688	4,586	3,369
1970	6,141	63,337	4,057	3,775

Infectious Diseases: The total number of cases notified to the Department in 1970 was 3,413, an increase of 1,225 over the 1969 total. Measles accounts for the greater part of this increase, with an increase of 1,087 notifications for that disease alone. Of the total number of notified cases, 611 were treated in hospital, 50 more than in the previous year.

Statistical information relating to infectious diseases is given in Tables (quote the tables corresponding to tables 15 and 16 of last year's report). The following paragraphs draw attention to several features of particular interest.

Food Poisoning: The major event of the year was a large outbreak of infection with **Salmonella typhimurium (phage type 32)** which affected the Broughty Ferry area in October. The organism was isolated from 33 people but the illness was relatively mild (only 7 requiring hospital treatment) and, consequently, the vast majority of cases were not reported. Attempts to assess the size of the outbreak left the impression that there were probably several hundred cases in Broughty Ferry and the surrounding district.

The vast majority of the cases had consumed Premium milk from a particular dairy and confirmation that this was the likely source of infection came with the information that there was a simultaneous outbreak in the County of Angus involving several members of families connected with the dairy and consumers of the same milk in a nearby village. The farmer agreed to send his milk for pasteurisation. In spite of the fact that this was a widespread outbreak mainly involving children, many of whom continued to excrete the organism for several months, there have been only three subsequent sporadic isolations of the same organism.

Coincidental with the Broughty Ferry outbreak, there was a smaller outbreak involving six children from three separate families in the Fintry area. This outbreak was caused by **Salmonella typhimurium (phage type 1A)** but the source of infection could not be traced. Five other cases of infection with **type 1A** came to notice during the year. Two returned with symptoms from holiday in Spain; a mother and child had taken ill while on holiday in Fife; and the fifth was an elderly man from the Fintry area but who was unconnected in time with the six cases reported above.

A further eight sporadic cases of infection with **Salmonella typhimirium** came to notice. Four of these were not typed; the remainder were one each of phage types U20, 32, U129 and U247.

Other Salmonella infections during the year were caused by **S.heidelberg** (three independent cases, two of which were infected in Spain); and one case each of **S.oranienburg** (from Spain), **S.dublin; S.newport** (from U.S.A.) and **S.enteritides.** The last was a Dundee lady who was infected in a large hotel outbreak in Bournemouth. She was a waitress in a local restaurant and had been back at work for some days before the infection was brought to our notice. However, there were no secondary cases. The case infected with S.oranienburg was of particular interest since she had been on holiday at Benidorm, Spain, at the time of the typhoid outbreak at that resort and was originally admitted to hospital in Dundee as a suspected case of enteric fever.

Attention has been drawn in the past to the number of Salmonella infections occurring in returning holidaymakers and this pattern continues to be seen. Of the cases presenting in the past year, seven had contracted the infection while on holiday in Spain.

One isolated case of food poisoning with **Cl.welchii** was reported. The organism was isolated from the patient but not from the remains of the cold meat which was the suspected foodstuff. No organisms were isolated in another outbreak which had the appearance of a Cl.welchii infection. It involved ten residents and four members of staff of an Old People's Home where cold tongue appeared to be the vehicle of infection.

Five other incidents involving six cases had the appearance of staphylococcal food poisoning but no organisms were demonstrated.

Eight other notifications were received but the cases were considered on subsequent investigation not to have been food poisoning.

Enteric Fever: No cases of typhoid or paratyphoid fever occurred during the year. One carrier of S.typhi (phage type C1) and one carrier of S.paratyphi remain under surveillance.

Dysentery: The total number of notifications for the year was 186, a decrease of 25 from the previous year. The latter half of 1969 had shown a marked decrease in the number of cases reported and the position remained quiet until October, 1970, when there was a sharp increase but one which did not reach the proportions of the winter outbreak of two years previously. The decline in the incidence of dysentery over the past few years is extremely gratifying. Of the total number of cases, four were bacteriologically proven to be Flexner dysentery and one was due to Sh.boydii. The latter had been nursing a case of the same infection who came from outwith the area.

Measles: In common with the rest of the country, we experienced a very large outbreak of measles with peaks in February, June and November. For six weeks during the late Autumn, notifications were running at between 50 and 80 cases per week, a situation for which there is no precedent. The total number of notifications for the year was 1,832 compared with 745 in 1969.

Pneumonia: Notifications increased from 296 to 326 of which 42 were reported as acute influenzal pneumonia.

Meningococcal Infections: 12 cases were confirmed, 1 more than in each of the previous two years. 9 presented as meningitis and 3 as septicaemia. Of the latter, 2 were fulminating cases. A 7-year old boy died at home within 18 hours of onset of what was originally thought to be a 'flu-like illness but a 9-year old boy, who was admitted to hospital, recovered after a critical illness.

Of the total, 4 were under one year, 4 between one and two years, 3 between three and ten years and the remaining case a man of 50. The sex distribution showed 9 males and 3 females.

Viral Infectious Hepatitis: The 364 cases compare with 349 in 1969. Although this is a further increase the impression is gained that the overall outbreak in the city is waning. Cases had been increasing towards the end of 1969 and this wave extended into the early months of 1970, affecting the Fintry and Lochee areas in particular. One-third of the year's total number of cases occurred in the first two months of the year. In mid-summer, the position was much quieter and while there was another increase in the late Autumn, this wave did not reach the proportions of previous years.

Leprosy: The single case known to the Department remains under surveillance. As previously reported, she was infected in the Caribbean area.

General Control Measures: Details of all admissions to King's Cross Hospital from the city of Dundee are telephoned daily to the Department and liaison is further strengthened by a weekly visit to that hospital by the Principal Medical Officer in Department. The Bacteriology Department, Dundee University, supplies daily reports of all relevant isolations from specimens submitted by hospitals, general practitioners, etc. in the Dundee area, while general matters concerning the laboratory service are discussed at a monthly meeting of representatives of the Bacteriology Department, King's Cross Hospital and the Health Department. Head Teachers of Dundee schools and nursery schools also notify all reported cases of infectious disease and the information from these three sources—hospital, laboratory and schools—is used to complement that obtained from general practitioner notifications.

Health Visitors pay routine home visits to the homes of all notified cases of dysentery, scarlet fever, erysipelas and viral hepatitis. Other infectious diseases are investigated as the situation demands.

Laboratory Facilities for Public Health Work: The University Bacteriology Department carries out a wide range of bacteriological and virological investigations of specimens submitted by actual or suspected cases of infectious disease and by contacts of such cases. In addition, they undertake routine bacteriological examination of milk, cream and ice cream for intestinal pathogens and for brucellosis; of water supplies and samples from swimming baths; of food suspected as the source of food poisoning outbreaks; of sewer swabs from the local abattoir; and of samples of bone meal, imported through the Port of Dundee, for the presence of anthrax bacilli.

Two firms involved in the preparation and handling of food have introduced policies whereby employees who have reported a gastrointestinal illness are excluded from work until cleared bacteriologically and one of these firms has extended this scheme to cover all employees who have been out of the country on business or holiday. (One of the year's Salmonella isolations was discovered in this way). The Bacteriology Department carries out these routine investigations and also the screening for intestinal pathogens of employees of the East of Scotland Water Board.

The Laboratory of the Public Analyst undertakes routine and special examinations of food and water supplies and the services of the Scottish Occupational Health Laboratory Service Limited were engaged in the investigation of a case of mercury poisoning.

Clinic Premises: During the year 1970, new clinic premises were opened in Magdalene's Kirkton. They are part of a community centre, library, police station and clinic complex and this is in line with a similar project at Menzieshill. Not only does this allow for a communal heating system but in the case of the library and clinic, even the staff-rooms have a shared purpose.

Forward plans are being prepared for a replacement clinic to be built in Charleston and when the housing development at Whitfield reaches an appropriate stage then plans will go ahead for the erection of a purpose-built clinic in this area.

Chiropody: At 31st December, 1970, the number of patients receiving treatment was 6,370 an increase of 549 over the previous year.

Details of the work carried out during the year are as follows:—

	Corns and Callosities	Nail Conditions	Bunions	Septic Conditions	Totals
New Cases	386	264	11	1	662
Re-Visits	12,122	4,017	315	166	16,620
	12,508	4,281	326	167	17,282

Domiciliary treatments amounted to 4,299 and are included in the above total. Staff shortage is still the main problem in maintaining an efficient service and the waiting time between treatments is still too long, also new patients have to wait 12 weeks or more before receiving attention for the first time. This situation does not only exist in Dundee and in some ways we are more fortunate than certain areas in other parts of the country.

The Chief Chiropodist attended the Society of Chiropodists Annual Convention in London from 15th September to 20th September, 1970.

Priority Housing, 1970: New applications for priority 1,161. Previous cases reviewed 349. Total cases dealt with 1,510. Of the above cases 8 were awarded outright medical priority, 197 were awarded secondary medical priority, 338 were awarded points, 60 received no further award and 25 were not supported. 851 transfer cases were submitted, 17 of which were awarded outright transfer priority, 350 were awarded points, 362 were not supported and 122 received no further award. 31 exchanges were supported. Interviews granted by Medical Officer and Clerical Staff 440.

Health Visiting: During 1970 we had several changes in staff, we lost six qualified members, one retired and the other five left for domestic reasons. One exisiting member married but wished to remain on a part-time basis. Since we have a Health Visitor Training School in Dundee, we had four newly qualified health visitors join the staff, one other an established health visitor was also appointed.

The district work continues to be of a high standard even although the case load of the health visitors has increased with new housing areas opening up.

We had 120 nursing students from the Eastern Regional Hospital Board Services doing their three weeks in the field of community nursing. They were attached to the health visitors for six sessions in this period. We also had 30 sixth year medical students, 8 triple duty nurses (uncertificated health visitors), 10 teacher students and 8 occupational nursing students who were out for one day each with the health visitor.

The staff of part-time nurses in schools and clinics have given their usual efficient service and have assisted in geriatric visiting. During an outbreak of Salmonella typhimurium, two school nurses took part in tracking down the source and contacts.

Our family helpers remain unchanged in number and personnel; their contribution to the community is of great value.

Progress of health visitor to group practice is a slow process. We introduced another two health visitors to group attachment. It has its advantages and disadvantages, the former being the discussion sessions with the general practitioners regarding patients. The disadvantages, from the health visitors' points of view, is time spent travelling. We now have two health visitors attached to a practice of four general practitioners, one doing the south and the other the north areas of the town. The other two health visitors are attached, one each to a group practice of three general practitioners but they can only cope with half of the city.

Health Education continues mainly in Mothercraft Classes; 8 health visitors have been involved in this work throughout the year. Afternoon classes are held weekly at three of our clinics and two clinics held evening sessions which have been well attended (280 sessions in all).

Two health visitors participated in mothercraft classes, one in Dundee Royal Infirmary, the other in Maryfield Hospital.

One health visitor was invited to give talks on hygiene and modified mothercraft in two Junior Secondary Schools. The talks were given weekly for six weeks making a total of 24 weeks; a total of 90 sessions.

Demonstration posters have been used regularly in the clinics and health visitors have made good use of the displays to give impromptu health talks to the mothers.

In the latter part of the year, health visitors were in attendance at Anti-Smoking clinics.

Once again we are indebted to the Health Committee for their permission to attend various courses:—

1 health visitor to a Senior Management Course in Edinburgh.
2 health visitors to the S.H.V.A. annual conference in Oban.
3 health visitors to two day study courses in Edinburgh.
2 health visitors to the summer school in St. Andrews.
2 health visitors to a Refresher course in Edinburgh.
2 health visitors to the Field Work Instructors Course in Edinburgh.

These courses are refreshing and enlightening and are necessary to stimulate the staff in the course of their duties.

During the year, the following home visits were undertaken:—

Home Visits		Home Visits	
Ante-Natal	7,819	T.B. Cases	1,363
Post-Natal	3,969	Nursery Investigations	484
Children under 1 year	17,820	Mentally sub-normal	657
Children 1-5 years	48,691	Psychiatric after-care	418
School Children	1,830	Geriatrics	8,656
Infectious disease	1,814	Other hospital aftercare	235
Infectious disease contacts	1,131	Problem families	1,153
Housing	394	Home accidents	316
Fostering and adoption	430	Cervical Cytology	95

Total Visits—97,275 Wasted Visits—20,374 Homes Visited—72,427

Port Health Adminstration: 296 ships arrived at the Port of Dundee during 1970, an increase of 43 over the previous year's total and an interesting reversal of the downward trend of the previous 4 years. Details of action taken in respect of these vessels are given in the Sectional Report of the Chief Sanitary Inspector. The Port Medical Officer visits on arrival:—

1. All ships on which cases of illness are reported;
2. All ships coming from infected ports and without prior clearance at an "excepted port" (as defined in the Public Health (Ships) (Scotland) Regulations, 1966);
3. All ships arriving direct from ports other than—
   (a) "excepted ports";
   (b) ports in Norway, Sweden, Denmark and Finland.

The Port Medical Officer boarded 30 such vessels on arrival, 3 more than in the previous year. The vessels had arrived from ports in the following countries:—

EUROPE: U.S.S.R.—9; Poland—6; Italy—4; Portugal—1; The Netherlands—1.
ASIA: Pakistan—9.

Ships from Italian ports are not normally visited since they are excepted under the above Regulations. The 4 ships cited were visited because they had called at a North African port during the voyage.

During the year, 3 seamen required hospital admission. A 31-year old Pakistani was admitted to King's Cross Hospital as a suspected case of amoebic hepatitis but investigations were negative. He recovered without treatment and was returned to his ship. A 19-year old Danish seaman from a ship in passage from Fraserburgh to Ipswich was landed at Dundee with a suspected acute appendicitis. He was admitted to Maryfield Hospital where he also recovered without treatment.

On Christmas Eve, the Port Medical Officer, on a routine visit to a ship, found a 53-year old Pakistani seaman in a seriously ill condition. He was admitted to Ashludie Hospital where he was found to be suffering from advanced pulmonary tuberculosis. (At the time of writing the Report he is still undergoing treatment).

Illnesses reported to the Port Medical Officer but not requiring hospital admission included 5 cases of venereal disease and 1 man with renal colic.

No cases of quarantinable diseases were seen during the year.

Port Health staff visiting ships make a point of drawing the attention of Masters to the local arrangements for the treatment of the venereal diseases and 25 merchant seamen were seen at the Special Treatment Centre during the year. 21 of these were new cases; 5 were suffering from non-specific urethritis, 2 from gonorrhoea and 3 from other venereal diseases. In the remaining 11 cases, no evidence of venereal disease was found.

Attention was drawn in my previous Report to the fact that no seamen had reported for follow-up of venereal conditions first diagnosed at clinics in other ports. An attempt has been made during the year to stress the importance of follow-up examinations and 4 cases were seen at the Special Treatment Centre, 1 each of syphilis, gonorrhoea, chancroid and other venereal disease.

Medical Arrangements for Long-Stay Immigrants: All immigrants notified to the Department by the port or airport of entry are visited by a member of the medical staff and contact is maintained until the person has registered with a general practitioner. If evidence of a satisfactory chest x-ray within 6 months of their arrival is not available, arrangements are made for this to be carried out locally. Children arriving from areas where there is a high incidence of tuberculosis are Heaf tested and offered B.C.G. vaccination if negative. Cases giving a positive Heaf reaction are followed up at the Chest Clinic.

Statistics for the year are given in the following table, in which the numbers in brackets refer to children accompanying adult immigrants. It should be noted that, of the total, 22 were students undertaking courses at local further education establishments and not intending to settle in this country and 14 were nurses coming either for training or to work at local hospitals.

Country of Origin	Notified	Successful Contact Made	X-Rayed	Untraced
Commonweath				
Pakistan	21 (4)	20 (4)	21	1
India	13 (16)	11 (7)	9	2 (9)
Ghana	4	4	4	
Hong Kong	4 (6)	4 (6)	4	
Kenya	3 (4)	3 (4)	3	
Mauritius	3	3	3	
Canada	2 (2)	2 (2)	2	
Malaysia	2	2	2	
Nigeria	2	1	1	1
Rhodesia	2	2	2	
Sierra Leone	2	2	2	
Australia	1	1	1	
Barbados	1	1	1	
Tanzania	1	1	1	
Zambia	1	1	1	
Alien				
Hong Kong	8	8	8	
Iraq	2	2	2	
South Africa	1	1	1	
Thailand	1			1
U.S.A.	1			1
	75 (32)	69 (23)	67	6 (9)

For comparison, the figures for previous years were:—

Year	Notified	Successful Contact Made	X-Rayed	Untraced
1969	74 (13)	68 (12)	64	6 (1)
1968	88 (32)	85 (29)	84	3 (3)
1967	44 (8)	35 (8)	34	9
1966	33 (12)	32 (12)	30	1

Six adults and nine children could not be traced. Two were Indian ladies with four and five children respectively. One had clearly given an address of convenience to the airport authorities and the other, an address which, while possibly given in good faith, could not be identified locally; a Pakistani student discontinued his studies and left for London before he could be contacted; and three professional men from Thailand, Nigeria and U.S.A. respectively failed to report to the establishments at which they had informed the airport authorities they had appointments.

The two who were traced but not x-rayed were both Indians. One was a lady who was pregnant on arrival and in whose case the examination was delayed until after the confinement, but who left the district immediately after confinement and before arrangements could be made. The other was an Indian dentist undertaking a post-graduate course who, despite repeated attempts at persuasion, failed to co-operate.

Sixteen of the 67 reported as x-rayed were able to produce evidence of a satisfactory chest x-ray in the country of origin; 17 were notified as having been x-rayed at London Airport and the remainder were examined either at Dundee Chest Clinic or, in the case of the student nurses, at the hospitals at which they were employed.

The task of tracing recently arrived immigrants is one which makes heavy demands on the time of the staff involved. The addresses given by the airport for Pakistani wives and families are generally those at which the husband was living at the time when application was made for entry to the United Kingdom. By the time the family arrives, however, the address frequently no longer applies; in many cases, it is found to be abandoned property. It is then extremely difficult to trace the family, since the information given by the airport does not include the father's name. Once traced, the members of the Pakistani community are invariably found to be extremely co-operative although one family from another country required repeated visits over a 10 month period before taking steps to secure medical care.

That this effort is worthwhile is borne out by the fact that during the year two cases of pulmonary tuberculosis were discovered within days of arrival, in a 17-year old and a 67-year old Pakistani respectively.

Tuberculosis in Immigrants: In addition to these two cases, 5 Pakistani men and 1 Pakistani woman were found to have pulmonary tuberculosis. They had been in the United Kingdom between 18 months and 3 years. A 16-year old Pakistani boy who had been in the country for 4 years was found to be a case of non-pulmonary tuberculosis.

Immigrants arriving at the Port of Dundee: No long-stay immigrants entered the country through the port during the year. A 53-year old Pakistani seaman was referred to the Medical Inspector by the Immigration Officer. He was refused permission to land under Section 2 (4) (a) of the Commonwealth Immigrants Act, 1962, but was allowed ashore for treatment of pulmonary tuberculosis at a local hospital. He will be repatriated as soon as he is fit to travel.

Collaboration with Social Work Department: Medical officers of the Health Department pay regular visits to residential accommodation provided by the Social Work Department for the elderly and the mentally handicapped, to accommodation provided by voluntary organisations and registered with the Social Work Department and also to the Senior Training Centres and Special Care Unit for the mentally handicapped. Advice is given about specific health measures relating to the establishments. A medical officer assists in assessing the suitability of elderly applicants for residential homes and takes part in the weekly admissions conference, at which all admissions are discussed. Medical officers are also involved in the assessment of elderly and disabled applicants for travel permits and for assistance under the garden maintenance scheme.

The Principal Medical Officer in Department acts as liaison officer between the Health and Social Work Departments and has been closely involved with the

Director of Social Work in the planning of further developments for the elderly and handicapped. He acts as Responsible Medical Officer for cases under Guardianship under the Mental Health (Scotland) Act, 1960, and is available for consultation by individual social workers at all times.

The Specialist Health Visitor who was formerly with the Mental Health Section acts as liaison officer between health visitors and social workers on matters relating to the mentally ill and mentally handicapped. She continues to undertake social enquiries in connection with the weekly Mental Deficiency Clinic which operates at Butterburn Clinic and to provide social work support for the Special Care Unit at Dudhope Gardens.

The Medical Officer of Health and Principal Medical Officer, together with the Director of Social Work and his Depute and representatives of the Local Medical Committee, form a Committee which meets regularly to consider the closer collaboration of general practitioners and the Social Work Department. The Medical Officer of Health has continued to act as chairman of the Joint Consultative Committee for Mental Health (Officer Committee) and the Principal Medical Officer has been reappointed secretary of this Committee.

TAY RIVER PURIFICATION BOARD

Oil Pollution, 1969. The Board's staff have continued to give assistance to the Dundee Harbour Trust and to the local authorities bordering the estuary in tracing the sources of oil pollution. Conditions in 1969 have shown a marked improvement on those in 1968 when, as previously reported, there was a serious and large scale pollution in the estuary as a result of the "Tanker Duchess" incident.

While the usual oil film was frequently noted in the vicinity of the several Dundee sewer outfalls, some of the more unusual sources of oil pollution in the estuary were:—

(a) During the construction of a new fuelling bay and effluent treatment plant to serve the British Rail Depot at Dundee, oil pipe lines were uncovered and ground contaminated by oil was disturbed. This caused the surface water drainage system to discharge a heavy oily film at times. These unsatisfactory conditions should cease when the effluent treatment plant is completed.

(b) Following a fracture of the boilerhouse feed pipe at a factory in Dundee an appreciable quantity of fuel oil was discharged into the boilerhouse and the adjoining factory building. Oil also entered the public sewer and was discharged to the estuary.

(c) There was a leakage of oil from a large number of rivet holes on the tanker "Hyala", berthed at King George Wharf, Dundee. The Dundee Harbour Authority submitted information to the Procurator Fiscal as a result of which the tanker company was later fined £100 and the "Hyala's" master £25.

(d) Following heavy rain, oil entered the Dighty Water from a disused mill dam. The dam had been filled with hard-core on which oil had been tipped.

1. **Oil Pollution, 1970.** It was hoped that the conditions in the estuary, referred to in the last Annual Report, would improve. The pollution did, in fact, cease

at the end of December, following a systematic check of all major users of oil in the Dundee district, but a further pollution occurred in January when the pipe line fractured between a tanker and the shore installation. Fortunately the bulk of the oil was retained on the wharf where it was collected and removed.

On the 29th February the oil tanker "Tank Duchess" which was lying in the estuary reported a leakage of oil after a crack had occured in her side. Action was taken to transfer oil from the leaking tank and also to discharge the cargo to the shore installation. It was later stated that 87 tons of a topped crude oil were lost during this period and this resulted in the deposit of oil along the south side of the estuary, which was especially heavy around Newport and on the north side at Stannergate and Broughty Ferry. A meeting was called of representatives from all the local authorities concerned and a technical working party, of which the River Inspector was a member, was formed to advise local authorities and private land owners on methods of clearing the beaches.

While it is difficult to see how the above mishap could have been prevented, the following cases illustrate how adequate precautions could have prevented pollution:—

(a) In March while Contractors were dismantling equipment in a quarry, the contents of the oil storage tank spilled and oil entered the Dighty Water. Fortunately on this occasion the Board's staff were quickly able to get to the site and to give advice as a result of which the flow of oil to the stream was soon stopped.

(b) In June, unauthorised persons entered a Dundee factory and opened the scour valve on one of the oil storage tanks, allowing a large quantity of oil to discharge on to waste land and eventually to drain to the sewer which discharges direct to the estuary. Appreciable quantities of oil were deposited not only on the foreshore but also in the Lochee Burn downstream of a storm overflow on the sewer which had operated because of heavy rain occurring during this period.

(c) Following heavy rain in May, oil began to enter the Dighty Water from a low lying area where waste material including oil had been tipped. Measures were taken to prevent a recurrence but the incident emphasises the need to examine tipping sites carefully before deciding whether they can be used for disposing of waste oil.

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TABLE I.

Return showing Causes of Death (corrected for transfers) at different Age Periods during 1970.

Cause of Death	ALL AGES Total	ALL AGES Males	ALL AGES Females	Under 4 weeks	4 wks. to 1 yr.	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	85 and over
Enteritis and other diarrhoeal diseases	7	5	2	1	2	—	—	—	—	—	—	1	1	—	2	—
Tuberculosis of Respiratory System	4	1	3	—	—	—	—	—	—	—	1	—	—	—	3	—
Other tuberculosis, including late effects	4	2	2	—	—	—	—	—	—	—	1	—	—	1	2	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal Infections	1	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis and its sequelae	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Other infective and parasitic diseases	3	3	—	—	—	—	—	—	—	—	—	1	—	1	1	—
Malignant neoplasms of stomach	46	19	27	—	—	—	—	—	—	—	2	6	7	21	8	2
Malignant neoplasms of trachea, bronchus and lung	130	100	30	—	—	—	—	—	—	—	2	18	31	52	24	3
Malignant neoplasm of breast	46	—	46	—	—	—	—	—	—	—	4	4	12	10	11	5
Malignant neoplasm of cervix uteri	14	—	14	—	—	—	—	—	—	—	—	5	5	2	2	—
Malignant neoplasms of lymphatic and haematopoietic tissues	32	13	19	—	1	—	—	1	1	—	—	—	3	7	5	1
Other malignant neoplasms	199	97	102	—	—	1	—	1	1	2	5	19	41	62	48	19
Benign and unspecified neoplasms	9	4	5	—	—	—	—	—	1	—	—	1	4	2	1	—
Diabetes mellitus	15	2	13	—	—	1	—	—	—	—	—	—	1	3	7	3
Avitaminoses and other nutritional deficiency	2	1	1	—	—	—	—	—	—	—	—	—	—	1	—	1
Anaemias	3	—	3	—	—	—	—	—	—	—	—	—	—	1	—	2
Other general diseases	4	—	4	—	—	—	—	—	—	—	—	—	—	1	2	1
Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other disease of nervous system	41	15	26	—	—	—	—	—	—	1	2	3	8	6	12	9
Active rheumatic fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic rheumatic heart disease	31	14	17	—	—	—	—	—	—	—	3	2	10	10	4	2
Hypertensive disease	38	11	27	—	—	—	—	—	—	—	—	3	5	10	13	7
Ischaemic heart disease	579	318	261	—	—	—	—	—	—	1	12	43	127	185	147	64
Other forms of heart disease	49	18	31	—	—	—	—	—	—	—	—	3	7	11	15	13
Cerebrovascular diseases	256	102	154	—	—	—	—	1	—	1	8	9	38	78	86	35
Other circulatory diseases	88	41	47	—	—	—	—	—	—	1	—	—	12	35	31	9
Influenza	22	11	11	—	—	—	—	—	—	—	2	1	3	8	4	4
Pneumonia	160	68	92	1	1	2	—	—	1	—	3	3	11	19	68	51
Bronchitis, emphysema and asthma	113	80	33	—	—	—	—	—	—	—	2	8	28	47	22	6
Other respiratory diseases	15	5	10	—	3	1	—	—	1	—	—	—	3	2	5	—
Peptic ulcer	10	5	5	—	—	—	—	—	—	—	—	—	2	6	1	1
Appendicitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Intestinal obstruction and hernia	6	4	2	—	—	—	—	—	—	—	—	1	—	2	3	—
Cirrhosis of liver	10	7	3	—	—	—	1	—	—	—	—	4	2	3	—	—
Other digestive diseases	18	10	8	—	—	—	—	—	—	1	—	1	1	4	6	5
Nephritis and nephrosis	9	4	5	—	—	—	—	—	—	—	1	—	2	2	1	3
Hyperplasia of prostrate	4	4	—	—	—	—	—	—	—	—	—	—	—	1	1	2
Infections of kidney	6	2	4	—	—	—	—	—	—	—	—	—	1	1	4	—
Other discase of gento-urinary system	6	3	3	—	—	—	—	—	—	—	—	1	—	1	3	1
Abortion	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other complications of pregnancy, childbirth and puerperium	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of skin, musculoskeletal system, etc.	6	1	5	—	—	—	—	—	1	—	—	1	—	1	1	2
Congenital anomalies of nervous system	7	4	3	4	—	1	—	1	1	—	—	—	—	—	—	—
Congenital anomalies of circulatory system	4	3	1	2	—	1	1	—	—	—	—	—	—	—	—	—
Other congenital anomalies	6	5	1	3	1	—	—	—	—	—	1	1	—	—	—	—
Birth injuries, difficult labour and other anoxic and hypoxic conditions	14	4	10	14	—	—	—	—	—	—	—	—	—	—	—	—
Other causes of perinatal mortality	3	2	1	3	—	—	—	—	—	—	—	—	—	—	—	—
Senility without mention of psychosis	2	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Ill-defined and unknown causes	2	—	2	—	—	—	—	—	—	—	—	—	1	—	1	—
Motor vehicle accidents	24	16	8	—	—	—	1	—	5	1	3	3	3	5	3	—
Other road vehicle accidents	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Accidents in the home	27	14	13	—	4	2	—	—	—	—	3	2	1	3	6	6
Other violence	31	17	14	—	—	2	1	—	7	2	2	4	4	3	4	2
Suicide and self-inflicted injury	35	17	18	—	—	—	—	—	2	7	7	8	9	2	—	—
	2142	1055	1087	28	12	11	5	4	21	17	64	158	390	613	559	260

TABLE II.

Death-rates at Various Age Periods (from all causes each year, 1961-70)

Age Periods	1961		1962		1963		1964		1965		1966		1967		1968		1969		1970	
	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate	No. of Deaths	Death-Rate
All Ages	2153	11.8	2260	12.3	2332	12.7	2222	12.0	2180	11.8	2356	12.8	2064	11.3	2220	12.2	2244	12.3	2142	11.8
0 - 5	104	6.1	114	6.9	88	5.1	87	5.1	76	4.4	71	4.2	75	4.4	65	3.9	74	4.6	51	3.3
5 - 15	8	0.3	16	0	8	0.3	17	0.5	14	0.5	11	0.4	15	0.5	12	0.4	7	0.2	9	0.3
15 - 25	9	0.4	16	0.7	13	0.5	16	0.7	21	0.9	26	1.1	12	0.5	15	0.6	19	0.7	21	0.8
25 - 35	31	1.2	14	0.5	21	0.9	18	0.8	25	1.1	30	1.3	20	0.9	17	0.8	19	0.9	17	0.8
35 - 45	53	2.3	46	2.0	58	2.5	59	2.5	59	2.5	61	2.6	64	2.8	53	2.5	58	2.8	64	3.1
45 - 55	165	7.1	195	8.4	162	6.7	151	6.2	139	5.7	139	5.8	142	5.9	131	6.2	130	6.2	158	7.6
55 - 65	384	19.8	414	21.0	392	19.0	381	18.4	404	19.5	401	19.5	341	16.7	404	19.0	432	20.5	390	18.6
65 plus	1399	65.6	1445	67.5	1590	80.0	1493	74.0	1442	71.4	1617	80.7	1395	70.2	1523	69.9	1505	67.2	1432	63.1

TABLE III.

Death-rate (from all causes) each month during the years 1961-70

Month	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
January	14.2	14.5	16.9	13.4	15.0	15.6	11.5	19.8	15.6	17.7
February	13.8	13.5	14.7	12.7	13.9	17.5	19.4	14.8	13.5	13.3
March	13.6	14.0	15.6	13.1	13.3	16.7	11.3	11.5	14.4	14.7
April	13.3	13.1	15.4	12.5	13.2	15.1	13.6	11.6	12.9	12.0
May	13.0	13.1	15.0	12.2	12.9	14.5	11.1	11.9	12.1	8.2
June	12.7	13.0	14.1	12.2	12.3	14.0	10.7	10.2	11.2	10.2
July	12.3	11.7	13.8	12.3	12.1	13.4	11.2	10.3	9.3	11.3
August	12.0	11.7	13.2	12.1	11.8	13.2	8.7	8.9	9.1	10.5
September	11.6	11.5	12.8	12.0	11.7.	12.8	9.8	11.3	13.0	10.5
October	11.6	11.5	12.7	11.9	11.5	12.6	10.9	11.6	10.5	9.2
November	11.6	11.6	12.5	12.0	11.5	12.6	12.5	11.9	10.0	11.6
December	11.8	12.3	12.7	12.1	11.7	12.7	13.7	11.9	16.7	11.8

TABLE IV.

Deaths and Death-rates from Various Groups of Causes Each Year since 1961 (all ages)

	1961 Pop., 182,854		1962 Pop., 183,560		1963 Pop., 184,119		1964 Pop., 185,228		1965 Pop., 185,296		1966 Pop., 183,744		1967 Pop., 182,284		1968 Pop., 182,340		1969 Pop., 181,950		1970 Pop., 181,508	
Disease Group	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.	No. of Deaths	Rate per 1,000 Pop.
Congenital	73	.40	84	.46	55	.30	60	.32	55	.30	47	.27	44	.24	44	.24	47	.26	34	.19
Digestive	83	.45	70	.38	70	.38	75	.40	62	.34	77	.43	64	.35	61	.33	65	.35	44	.25
Respiratory	192	1.05	210	1.14	258	1.40	192	1.04	237	1.28	272	1.49	185	1.01	236	1.29	250	1.38	288	1.59
Infective	25	.14	20	.11	21	.12	13	.07	12	.07	23	.13	14	.08	30	.16	20	.11	42	.24
Circulatory	775	4.24	807	4.4	816	4.43	822	4.44	783	4.23	869	4.63	764	4.19	1089	5.97	1095	6.02	1041	5.70
Genito-urinary	53	.29	34	.18	54	.29	44	.24	34	.19	39	.22	31	.17	41	.23	44	.24	25	.14
Malignant	444	2.43	493	2.69	506	2.75	472	2.55	515	2.78	497	2.72	469	2.58	485	2.66	513	2.82	467	2.58
Nervous	321	1.76	363	1.98	371	2.02	402	2.17	330	1.79	351	1.92	312	1.71	43	.24	39	.21	41	.23
Other Causes	187	1.02	179	.97	181	.98	142	.77	152	.82	181	.99	181	.99	191	1.05	171	.94	160	.88
	2153	11.77	2260	12.31	2332	12.67	2222	12.0	2180	11.8	2356	12.8	2064	11.32	2220	12.17	2244	12.33	2142	11.80

TABLE V.

Certified Causes of Death at Various Ages Under 1 Year during 1970

Cause of Death	WEEKS					MONTHS					
	Under 1	1/2	2/3	3/4	Total	Under 2	2/3	3/6	6/9	9/12	Total
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—
Meningococcal Infections	—	—	—	—	—	—	—	—	—	—	—
Other General Diseases	—	—	—	—	—	—	—	—	—	—	—
Meningitis	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis—											
Lung	—	—	—	—	—	—	—	—	—	—	—
General	—	—	—	—	—	—	—	—	—	—	—
Abdominal	—	—	—	—	—	—	—	—	—	—	—
Brain	—	—	—	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—	—	—	—
Other Infectious and Parasitic Diseases	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	1	—	—	—	1	—	—	1	—	—	2
Bronchitis	—	—	—	—	—	—	—	—	—	—	—
Laryngitis	—	—	—	—	—	—	—	—	—	—	—
Other Diseases of Respiratory System	—	—	—	—	—	—	1	2	—	—	3
Malignant Neoplasms of Lymphatic and Haematopoietic Tissues	—	—	—	—	—	—	—	1	—	—	1
Benign and Unspecified Neoplasms	—	—	—	—	—	—	—	—	—	—	—
Other Diseases of Nervous System	—	—	—	—	—	—	—	—	—	—	—
Cerebro Vascular Disease	—	—	—	—	—	—	—	—	—	—	—
Enteritis and Other Diarrhoeal Diseases	—	1	—	—	1	—	—	2	—	—	3
Intestinal Obstruction and Hernia	—	—	—	—	—	—	—	—	—	—	—
Other Digestive Diseases	—	—	—	—	—	—	—	—	—	—	—
Congenital Anomalies of Nervous System	1	2	1	—	4	—	—	—	—	—	4
Congenital Anomalies of Circulatory System	2	—	—	—	2	—	—	—	—	—	2
Other Congenital Anomalies	2	1	—	—	3	—	—	—	1	—	4
Birth Injury, Difficult Labour and other Anoxic and Hypoxic Conditions	13	1	—	—	14	—	—	—	—	—	14
Other Causes of Perinatal Mortality	3	—	—	—	3	—	—	—	—	—	3
Motor Vehicle Accidents	—	—	—	—	—	—	—	—	—	—	—
Accidents in the Home	—	—	—	—	—	—	2	1	—	1	4
Other violence	—	—	—	—	—	—	—	—	—	—	—
TOTALS	22	5	1	—	28	—	3	7	1	1	40

TABLE VI.

Infant Mortality Rates from Various Groups of Causes Each Year 1961-70

Year	Congenital	Digestive	Respiratory	Infectious Disease	All Other Causes	Rate Per 1,000
1961	17.4	1.1	3.0	0.5	2.2	24.2
1962	20.3	1.9	2.9	—	2.9	28.0
1963	12.2	1.6	3.2	0.8	1.8	19.6
1964	14.4	0.5	1.8	0.3	1.8	18.8
1965	13.3	0.3	1.4	—	3.0	18.0
1966	13.8	0.6	2.1	0.3	1.5	18.3
1967	12.8	0.6	1.9	0.6	3.0	18.9
1968	12.8	0.3	1.6	0.9	2.4	18.0
1969	13.4	0.3	1.6	0.7	4.2	20.2
1970	9.3	—	1.7	1.0	1.7	13.7

TABLE VII.

Infant Mortality Rates from All Causes at Various Age Periods 1961-70

Year		Births	Death Rates			
			Under 1 Week	Under 1 Month	Under 3 Months	Under 1 Year
1961	...	3,681	13	16	21	24
1962	...	3,745	18	21	23	28
1963	...	3,766	12	13	15	20
1964	...	3,828	12	13	15	19
1965	...	3,676	13	13	15	18
1966	...	3,338	11	13	14	18
1967	...	3,279	9	11	13	19
1968	...	3,278	9	13	15	18
1969	...	3,066	10	13	15	20
1970	...	2,921	8	9	10	14

TABLE VIII.

Number of Illegitimate Births, Number of Deaths (under 1 year) of Illegitimate Infants, and Death-rate per 1,000 Illegitimate Births, since 1961

Year			Illegitimate Births	Deaths of Illeg. Infants	Rate per 1,000 Illeg. Births
1961	...	...	247	7	28
1962	...	...	248	13	52
1963	...	...	279	10	36
1964	...	...	293	10	34
1965	...	...	333	9	27
1966	...	...	327	10	33
1967	...	...	386	9	23
1968	...	...	386	7	18
1969	...	...	311	5	16
1970	...	...	301	5	17

TABLE IX.

Table showing Number of Stillbirths and Rate per 1,000 Births 1961-70

Year	No. of Stillbirths	Total of Live Births and Stillbirths	Rate per 1,000 total Births (Live & Still)
1961	78	3,759	20.75
1962	70	3,815	18.35
1963	71	3,837	18.50
1964	49	3,877	12.64
1965	68	3,744	18.16
1966	37	3,375	10.96
1967	36	3,315	10.85
1968	38	3,316	11.46
1969	28	3,094	9.05
1970	34	2,955	11.50

TABLE X.

Annual Death-Rate per 100,000 population and Case Mortality, per cent., from Measles and Whooping Cough Each Year since 1961

Year	Cases	Deaths	Death Rate per 100,000	Case Mortality per cent.	Cases	Deaths	Death Rate per 100,000	Case Mortality per cent.
	MEASLES				WHOOPING COUGH			
1961 ...	799	—	—	—	59	—	—	—
1962 ...	1,032	—	—	—	20	—	—	—
1963 ...	538	2	1.1	.37	448	—	—	—
1964 ...	127	—	—	—	51	—	—	—
1965 ...	671	—	—	—	25	—	—	—
1966 ...	615	—	—	—	65	—	—	—
1967 ...	225	—	—	—	207	1	.54	.48
1968 ...	173	1	0.5	.58	22	—	—	—
1969 ...	745	—	—	—	8	—	—	—
1970 ...	1,832	—	—	—	173	—	—	—

TABLE XI.

Maternal Mortality Rates — Number of Deaths per 1,000 Registered Births plus Stillbirths 1961-70

1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
.27	.79	.78	—	.26	.59	.30	.30	.30	—

TABLE XII.

Death-rate per 100,000 Each Year since 1961 from the Respiratory Diseases (including Bronchitis, Pneumonia (all forms), Pleurisy, Laryngitis, etc.)

Year	Total Deaths	Death-Rate per 100,000
1961	192	105.0
1962	210	114.0
1963	258	140.0
1964	192	103.7
1965	237	127.9
1966	272	148.1
1967	185	101.5
1968	236	129.4
1969	250	137.4
1970	288	158.7

TABLE XIII.

Deaths in which Influenza was given as a Cause of Death Each Month, January, 1961 to December, 1970

Months	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
January	0	1	1	0	0	3	0	11	1	19
February	6	0	1	0	0	9	0	4	0	0
March	2	1	4	0	1	5	0	1	3	0
April	0	0	1	0	0	0	0	0	0	2
May	0	0	0	0	0	0	0	0	0	1
June	1	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0
November	0	1	0	0	0	0	0	0	0	0
December	1	3	0	0	0	0	0	0	3	0
	10	6	7	0	1	17	0	16	7	22

TABLE XIV.

Deaths in which Influenza appeared as a Cause in Death Certificate, 1961-70, Classified in Age Periods

Age Periods	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Under 1 year	1	0	2	0	0	1	0	0	0	0
1 -5 years	0	0	0	0	0	1	0	0	0	0
5 - 15 years	0	0	0	0	0	1	0	0	0	0
15 - 25 years	0	1	0	0	1	0	0	0	1	0
25 - 45 years	1	4	0	0	0	0	0	0	0	2
45 - 65 years	3	0	2	0	0	1	0	1	2	4
65 and upwards	5	1	3	0	0	13	0	15	4	16
	10	6	7	0	1	17	0	16	7	22

TABLE XV.

INFECTIOUS DISEASES — Number of Cases of Each Disease Notified and Accepted in Dundee During the Year 1970

Also Number Removed and Number Not Removed to Hospital

Disease		At all ages	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 65	65 and upwards	Cases removed to Hospital	Cases not removed to Hospital
Anthrax	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever	M	9	3	3	2	—	—	—	1	—	9	—
	F	3	1	2	—	—	—	—	—	—	3	—
Chickenpox	M	124	1	18	103	—	2	—	—	—	8	116
	F	125	—	20	105	—	—	—	—	—	2	123
Cholera	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Dysentery	M	89	7	44	30	4	1	2	1	—	59	30
	F	97	6	37	26	9	8	7	3	1	52	45
Encephalitis Lethargica	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	M	6	—	—	—	—	—	1	2	3	2	4
	F	8	—	—	—	—	—	1	6	1	5	3
Food Poisoning	M	31	3	7	10	6	—	2	1	2	13	18
	F	49	1	4	17	4	3	2	4	14	13	36
Jaundice, Infective*	M	169	—	19	93	30	9	9	7	2	25	144
	F	195	1	23	94	50	13	7	4	3	36	159
Leprosy	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Malaria	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Measles	M	891	38	455	395	2	1	—	—	—	57	834
	F	941	46	498	395	—	1	—	1	—	43	898
Ophthalmia Neonatorum	M	2	2	—	—	—	—	—	—	—	—	2
	F	3	3	—	—	—	—	—	—	—	1	2
Plague	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Acute Influenzal	M	21	1	—	1	—	1	3	6	9	9	12
	F	21	—	—	—	—	—	3	5	13	16	5
Pneumonia, Acute Primary	M	128	4	19	11	4	6	4	29	51	108	20
	F	156	7	12	7	7	2	6	30	85	119	37
Pneumonia (not otherwise notifiable)	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis, Acute (Paralytic)	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis, Acute (Non-Paralytic)	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever/Pyrexia	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Rubella	M	48	—	2	46	—	—	—	—	—	—	48
	F	27	—	1	26	—	—	—	—	—	—	27
Scarlet Fever	M	45	—	16	26	3	—	—	—	—	6	39
	F	52	—	15	37	—	—	—	—	—	5	47
Smallpox	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Para-Typhoid A	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Para-Typhoid B	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Typhus Fever	M	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—
Whooping-Cough	M	82	9	19	54	—	—	—	—	—	11	71
	F	91	10	23	58	—	—	—	—	—	9	82
TOTAL	M	1645	68	602	771	49	20	21	47	67	307	1338
	F	1768	75	635	765	70	27	26	53	117	304	1464

* All refer to Viral Infectious Hepatitis

TABLE XVI.

Monthly Notifications and Intimations of Infectious Diseases, Dundee, 1970

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Accepted Total
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever	4	1	1	1	—	—	—	2	—	—	1	—	10	12
Chickenpox	31	43	20	17	14	7	2	—	21	29	30	38	252	249
Continued Fever (undulant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	8	5	10	11	10	16	19	4	13	40	29	33	198	186
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	3	2	2	2	—	2	1	—	3	—	15	14
Food Poisoning	—	2	1	2	1	15	1	8	4	23	18	5	80	80
Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles (Morbilli)	164	140	121	87	100	148	128	85	145	230	292	182	1822	1832
Measles (Rubella)	6	8	17	10	10	6	1	—	2	5	7	3	75	75
Ophthalmia Neonatorum	—	1	—	—	—	—	2	1	—	—	—	—	4	5
Pneumonia Acute Influenzal	41	2	—	—	—	—	—	—	—	—	—	—	43	42
Pneumonia Acute Primary	108	30	33	22	19	12	9	12	16	19	26	23	329	284
Poliomyelitis Acute (Paralytic)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	11	18	6	10	7	11	5	2	2	6	15	8	101	97
Paratyphoid B	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Viral Infectious Hepatitis	53	62	25	29	41	26	17	26	16	26	29	13	363	364
Whooping Cough	1	—	2	—	—	—	5	1	3	23	66	66	167	173
	427	312	239	191	204	243	189	143	223	401	516	371	3459	3413

TABLE XVII.

TUBERCULOSIS — Notifications and Deaths with corresponding rates per 1,000 population at Various Age Periods Each Year since 1961

	PULMONARY TUBERCULOSIS												NON-PULMONARY TUBERCULOSIS											
	0-5		5-15		15-25		25-45		45-65		65 & over		0-5		5-15		15-25		25-45		45-65		65 & over	
	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000	No.	Per 1,000
1961 Notifications	7	.41	8	.26	16	.70	43	.89	42	.98	14	.66	2	.12	2	.07	6	.26	8	.17	6	.14	5	.23
Deaths ...	—	—	—	—	—	—	1	.02	3	.07	7	.33	—	—	—	—	—	—	—	—	1	.02	2	.09
1962 Notifications	13	.76	15	.49	18	.79	42	.86	43	1.00	5	.23	—	—	1	.03	1	.04	12	.25	11	.26	1	.05
Deaths ...	—	—	—	—	—	—	1	.02	3	.07	2	.09	—	—	—	—	—	—	—	—	1	.02	—	—
1963 Notifications	6	.35	5	.16	24	.99	41	.88	28	.63	19	.95	1	.06	—	—	1	.04	9	.19	6	.13	1	.05
Deaths ...	—	—	—	—	—	—	2	.04	4	.09	6	.30	—	—	—	—	—	—	—	—	—	—	—	—
1964 Notifications	4	.23	13	.42	10	.41	30	.64	22	.49	12	.59	—	—	2	.06	2	.08	8	.17	3	.07	5	.25
Deaths ...	—	—	—	—	—	—	1	.02	1	.02	6	.30	—	—	—	—	—	—	—	—	1	.02	2	.10
1965 Notifications	6	.35	6	.19	15	.61	32	.68	21	.47	12	.59	—	—	—	—	6	.25	11	.23	6	.13	4	.20
Deaths ...	—	—	—	—	—	—	1	.02	1	.02	3	.15	—	—	—	—	—	—	—	—	1	.02	—	—
1966 Notifications	7	.41	6	.19	6	.25	33	.71	20	.45	8	.40	—	—	2	.06	6	.25	17	.36	4	.09	2	.10
Deaths ...	—	—	—	—	—	—	1	.02	2	.04	1	.05	—	—	—	—	—	—	—	—	—	—	2	.10
1967 Notifications	1	.06	3	.09	10	.41	17	.36	21	.47	12	.60	—	—	1	.03	2	.08	7	.15	3	.07	3	.15
Deaths ...	—	—	—	—	—	—	1	.02	1	.02	4	.20	—	—	—	—	—	—	—	—	—	—	2	.10
1968 Notifications	1	.06	7	.22	13	.48	26	.61	30	.70	13	.60	—	—	1	.03	3	.11	16	.38	5	.12	3	.14
Deaths ...	—	—	—	—	—	—	2	.05	2	.05	1	.05	—	—	—	—	—	—	—	—	—	—	1	.05
1969 Notifications	—	—	12	.37	5	.18	38	.90	32	.76	26	1.16	—	—	—	—	4	.15	7	.16	5	.12	6	.27
Deaths ...	—	—	—	—	—	—	—	—	—	—	2	.09	—	—	—	—	—	—	—	—	2	.05	—	—
1970 Notifications	—	—	9	.28	10	.37	14	.34	16	.38	15	.66	—	—	—	—	3	.11	3	.07	5	.12	3	.13
Deaths ...	—	—	—	—	—	—	1	.02	—	—	3	.13	—	—	—	—	—	—	1	.02	—	—	3	.13

TABLE XVIII.

TUBERCULOSIS — Notifications and Deaths with corresponding rates per 1,000 population for Each Year since 1961

		Notification and Case Rate						Deaths and Death Rates					
	Estimated Population	Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis		Tuberculosis (all forms)		Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis		Tuberculosis (all forms)	
		No.	per 1000	No.	per 1000	No.	per 1000	No.	per 1000	No.	per 1000	No	per 1000
1961	182,854	130	.71	29	.16	159	.87	11	.06	3	.02	14	.08
1962	183,560	136	.74	26	.14	162	.88	6	.03	1	.01	7	.04
1963	184,119	123	.67	18	.10	141	.76	12	.07	—	—	12	.07
1964	185,228	91	.49	20	.11	111	.60	8	.04	3	.02	11	.06
1965	185,296	92	.50	27	.15	119	.65	5	.02	1	.01	6	.03
1966	183,744	80	.43	31	.17	111	.60	4	.02	2	.01	6	.03
1967	182,284	64	.35	16	.08	80	.43	6	.03	2	.01	8	.04
1968	182,340	90	.49	28	.15	118	.64	5	.02	1	.01	6	.03
1969	181,950	113	.62	22	.12	135	.74	2	.01	2	.01	4	.02
1970	181,508	64	.35	14	.08	78	.43	4	.02	4	.02	8	.04

TABLE XIX.

PULMONARY TUBERCULOSIS — Notifications and Deaths with corresponding rates per 1,000 population for Each Sex Each Year since 1961

	Notifications				Deaths			
	Males		Females		Males		Females	
Year	No.	per 1000	No.	per 1000	No.	per 1000	No.	per 1000
1961	78	.91	52	.53	4	.05	7	.07
1962	89	1.04	47	.48	6	.07	—	—
1963	74	.86	49	.50	8	.09	4	.04
1964	51	.59	40	.41	6	.07	2	.02
1965	64	.74	28	.28	4	.05	1	.01
1966	52	.61	28	.28	4	.05	—	—
1967	41	.48	23	.24	4	.04	2	.02
1968	65	.75	25	.26	5	.06	—	—
1969	68	.79	45	.47	2	.02	—	—
1970	36	.42	28	.29	1	.01	3	.03

TABLE XX.

PULMONARY TUBERCULOSIS — Deaths in Institutions Each Year since 1961

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Total Deaths from Pul. Tuberculosis ...	11	6	12	8	5	4	6	5	2	4
No. of Deaths from Pul. Tuberculosis in Institutions ...	6	3	8	6	4	2	4	4	2	3
Percentage of Total Deaths from Pul. Tuberculosis dying in Institutions ...	54.5	50.0	66.6	75.0	80.0	50.0	66.6	80.0	100.0	75.0

TABLE XXI.

MALIGNANT DISEASES — Number of Deaths and Death-rates per 10,000 population Each Year since 1961

Year	Males	Females	Total	Rates
1961	208	236	444	24.28
1962	244	249	493	26.86
1963	245	261	506	27.48
1964	247	225	472	25.48
1965	265	250	515	27.79
1966	248	249	497	27.05
1967	253	216	469	25.73
1968	246	239	485	26.59
1969	282	231	513	28.20
1970	229	238	467	25.73

TABLE XXII.

Age and Sex Distribution of Deaths from Malignant Diseases during 1970 showing parts of the Body affected

MALES

Location	All Ages	0 - 5	5 - 15	15 - 25	25 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 & Over
All Sites	229	1	1	—	2	4	2	13	13	20	37	46	41	25	14	10
Lip	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mouth, Palate	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Tongue	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Jaw	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Salivary Glands, Parotid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tonsils	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Pharynx, Fauces	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nasopharynx	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Cheek	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Buccal Cavity, etc. Total	5	—	—	—	1	—	—	—	—	—	1	—	1	—	1	1
Oesophagus, Gullet	7	—	—	—	—	—	—	—	—	—	3	1	2	1	—	—
Stomach, Pylorus	23	—	—	—	—	1	1	1	2	4	1	4	7	—	2	—
Intestine	17	—	—	—	1	1	—	2	2	1	2	2	—	3	1	2
Abdomen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rectum	11	—	—	—	—	—	—	—	—	2	2	1	3	2	1	—
Liver, Gall Bladder	5	—	—	—	—	—	—	—	—	—	1	1	1	1	—	1
Pancreas	12	—	—	—	—	—	—	—	1	1	2	3	3	—	2	—
Peritoneum. Omentum Mesentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Digestive Organs, etc. Total	75	—	—	—	1	2	1	3	5	8	11	12	16	7	6	3
Nose (Internal) Antrum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Larynx	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
Lung, Bronchus, Trachea	100	—	—	—	—	—	1	6	6	8	13	27	19	13	4	3
Mediastinium, Pleura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Respiratory Organs Total	102	—	—	—	—	—	1	6	6	8	13	27	19	15	4	3
Breast	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Prostate	6	—	—	—	—	—	—	—	—	—	—	—	1	2	1	2
Testis	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Penis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scrotum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Male Genital Organs Total	7	—	—	—	—	1	—	—	—	—	—	—	1	2	—	2
Kidney	5	—	—	—	—	1	—	—	1	—	—	—	1	—	1	1
Bladder, Urethra	8	—	—	—	—	—	—	1	1	1	1	2	1	1	—	—
Urinary Organs Total	13	—	—	—	—	1	—	1	2	1	1	2	2	1	1	1
Anus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ear	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nose (external)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scalp, Face (rodent ulcer)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Skin	2	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—
Skin Total	2	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—
Brain	5	—	1	—	—	—	—	1	—	—	2	1	—	—	—	—
Spinal Cord	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brain and Nervous System Total	5	—	1	—	—	—	—	1	—	—	2	1	—	—	—	—
Adrenals	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Arm, Leg	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bones	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Eye	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Heart	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lymphatic	12	—	—	—	—	—	—	1	—	1	6	3	—	—	1	—
Pelvis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rib, Sternum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spleen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Thorax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Throat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Thyroid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Not Stated	7	—	—	—	—	—	—	—	—	1	3	1	2	—	—	—
Other or Unspecified Organs Total	21	1	—	—	—	—	—	1	—	3	9	4	2	—	—	—

FEMALES

Location	All Ages	0 - 5	5 - 15	15 - 25	25 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 & Over
All Sites	238	1	1	2	—	1	6	16	12	21	28	30	40	32	28	20
Lip	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mouth, Palate	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tongue	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Jaw	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Salivary Glands, Parotid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tonsils	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pharynx, Fauces	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nasopharynx	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cheek	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Buccal Cavity, etc. Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oesophagus, Gullet	8	—	—	—	—	—	—	1	1	1	2	2	—	1	—	—
Stomach, Pylorus	27	—	—	—	—	—	—	4	—	—	1	5	9	2	4	2
Intestine	31	—	—	—	—	—	1	1	1	4	2	2	4	3	8	5
Abdomen	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Rectum	12	—	—	—	—	—	—	—	—	1	—	—	4	1	1	5
Liver, Gall Bladder	6	—	—	1	—	—	—	—	—	—	—	1	—	2	2	—
Pancreas	10	—	—	—	—	—	—	1	—	—	1	3	4	—	1	—
Peritoneum, Omentum Mesentery	2	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Digestive Organs, etc. Total	97	—	—	1	—	—	1	7	2	6	7	13	21	9	16	14
Nose (Internal) Antrum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Larynx	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lung, Bronchus, Trachea	30	—	—	—	—	—	1	4	2	2	7	2	5	5	2	—
Mediastinium, Pleura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Respiratory Organs Total	30	—	—	—	—	—	1	4	2	2	7	2	5	5	2	—
Cervix	14	—	—	—	—	—	—	1	4	4	1	1	1	2	—	—
Uterus, other or unspecified	7	—	—	—	—	—	—	—	—	—	1	2	1	—	3	—
Uterus Total	21	—	—	—	—	—	—	1	4	4	2	3	2	2	3	—
Ovary, Fallopian Tube	5	—	—	—	—	—	—	—	—	—	2	2	—	—	1	—
Vagina, Vulva	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Other Female Genital Organs Total	6	—	—	—	—	—	—	—	1	—	2	2	—	—	1	—
Breast	46	—	—	—	—	1	3	2	2	7	5	3	7	9	2	5
Kidney	3	—	—	—	—	—	—	1	—	—	—	—	1	—	1	—
Bladder, Urethra	6	—	—	—	—	—	—	—	1	—	1	1	—	2	1	—
Urinary Organs Total	9	—	—	—	—	—	—	1	1	—	1	1	1	2	2	—
Anus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ear	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nose (external)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scalp, Face (rodent ulcer)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Skin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Skin Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brain	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—
Spinal Cord	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brain and Nervous System Total	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—
Adrenals	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Arm, Leg	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bones	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Eye	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Heart	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lymphatic	19	1	1	1	—	—	—	—	—	2	1	3	4	3	2	1
Pelvis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rib, Sternum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spleen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Thorax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Throat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Thyroid	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
Others	2	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—
Not Stated	3	—	—	—	—	—	—	1	—	—	—	2	—	—	—	—
Other or Unspecified Organs Total	27	1	1	1	—	—	1	1	—	2	2	6	4	5	2	1

TABLE XXIII.

Number of Births per 1,000 population, Illegitimate Births per 100 Registered Births, and Marriages per 1,000 population Each Year since 1961

Year	Birth rate	Illegitimate rate	Marriage rate
1961	20.1	6.7	8.0
1962	20.4	6.6	8.0
1963	20.5	7.4	7.8
1964	20.7	7.7	7.7
1965	19.8	9.1	7.7
1966	18.2	9.8	8.1
1967	18.0	11.8	8.8
1968	18.0	11.8	9.7
1969	16.9	10.1	9.3
1970	16.1	10.3	8.8

TABLE XXIV.

FACTORIES ACTS, 1961

Report of the Medical Officer of Health in respect of the Year 1970

Part I. of the Act

1) INSPECTIONS for purposes of provisions as to health (including Inspections made by Sanitary Inspectors).

Premises (1)	Number on Register (2)	Inspections (3)	Number of Written Notices (4)	Occupiers Prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	11	9	—	—
(ii) Factories not included in (1) in which Section (7) is enforced by the Local Authority	761	503	19	1
(iii) Other premises in which Section (7) is enforced by the Local Authority (including outworkers' premises)	48	43	—	—
Total	820	555	19	1

(2) CASES in which defects were found.

Particulars	Number of cases in which defects were found: Found	Remedied	Referred to H.M. Inspector	Referred by H.M. Inspector	No. of cases in which Prosecutions were instituted
(1)	(2)	(3)	(4)	(5)	(6)
Unreasonable temperature (S.3.) ...	—	—	—	—	—
Inadequate ventilation (S.4.)	—	—	—	—	—
Want of cleanliness (S.1.)	—	—	—	—	—
Overcrowding (S.2.)	—	—	—	—	—
Ineffective drainage of floors (S.6.) ...	—	—	—	—	—
Sanitary Conveniences (S.7.)—					
(a) Insufficient	1	2	—	2	—
(b) Unsuitable or defective	50	69	—	25	1
(c) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to outwork)	2	2	—	—	—
Total	53	73	—	27	1

Part VIII. of the Act — Outwork (Sections 133 and 134)

There were six cases under this part of the Act concerning out-workers in August list required by Section 133 (1) (c) who were engaged in the making, etc., cleaning and washing of wearing apparel.

Child Health Services

Report by Dr. W. M. FEE

The predominant feature of the Child Health section's work during 1970 was the preparation for forthcoming development which, it is hoped, will further enhance the Department's work in the field of preventive paediatrics.

To that end, a start was made in setting up a computer programme which, it is hoped, will facilitate the gathering of data relating to the health of children in the City and to measures taken to protect and potentiate it. The future assistance of the Corporation's computer facilities will be a significant advance in the effective operation of the Department's "At Risk" and "Exceptional" Registers, by whose operation the ascertainment and supervision of handicapped children is facilitated. I would wish to record our appreciation of the assistance given us in this work by the Department of Social Medicine and by the computer staff in the City Chamberlain's Department.

Statistics relating to child health in the City were again favourable in relation to the national figures. A matter of particular note in 1970 was the lowest infant mortality rate in the City's history (14 per 1,000 live births), although this welcome distinction was somewhat counter-balanced by the fact that the stillbirth rate rose from its low record level of 9 per 1,000 total births in 1969, to 12 this year.

This year also saw the opening of the new Kirkton Clinic in continuation of the Health Committee's policy to provide modern clinic facilities in peripheral areas of the City. This small but excellent clinic forms part of a community complex, and with its coming the facilities previously provided in the West March Church Hall have now been terminated, and with their going an era comes to an end also. For many years it has been the policy of Local Authority Child Health Services to provide clinics in loci which were placed to best advantage throughout the City, where mothers and young children could reach them easily. Frequently, no formal clinics could be provided until the Health Committee's building programme matured, and it became almost traditional, here and elsewhere, for local churches to receive our medical and nursing staff into their halls, and a long and happy association resulted. With the ending of such arrangements here, a word of appreciation to all those church authorities who assisted the Health Department in the past is indicated.

Cervical Cytology

The Local Authority's main effort in this direction was made in 1967/68 when a comprehensive and successful drive to screen a significant proportion of women in the appropriate age groups was carried out; since that time, the demand for cervical cytology has naturally declined, although facilities, as necessary, are still provided in Local Authority clinics, and in hospitals. During the year, 574 women were dealt with in these clinics. Preparations were also put in hand for the next phase of this work which will be the five yearly follow-up of these women first seen in the clinics in 1967.

Family Planning

The Local Authority continued to support the work of the Family Planning Association in Dundee, both by financial grant and by providing accommodation in four of the City's clinics, apart from services provided by the Association in the City's hospitals. A domiciliary service is also provided by the Association whose services are in much and continuing demand.

Health Education

A considerable amount of the Department's activities in the field of health education was given in the Annual Report for 1969, and these activities continue, particularly in the anti-smoking field. During the year a prominent window display was provided in the City Square relating to the risks of cigarette smoking. Plans were initiated to enlarge and diversify the work of the anti-smoking clinics, group therapy and health education being joined, in the autumn of the year, by other methods of treatment.

Apart from this, medical and nursing staff took all available opportunities to provide health education on a variety of topics in schools and clinics, either by lecturing, or by arranging for the exhibition of suitable publicity of other topics such as the prevention of home accidents, safety on holiday, and immunisation. The Department also provided the medical representation upon both Local and National Working Parties on the question of future health education in Scottish schools.

MATERNITY AND CHILD WELFARE SERVICES

Registration of Births: 3,275 live births were registered in Dundee during 1970, corrected to 2,921 (1,529 males and 1,392 females) after allowing for outward and inward transfers. This represents a live birth rate of 16.1 per 1,000 of the population.

The number of illegitimate live births registered in the City was 351 and after allowing for transfers the corrected number was 301 (161 males and 140 females) which is equivalent to an illegitimate rate of 10.3% of all live births.

There were 46 stillbirths registered in the City during the year and after correction for transfers the corrected figure was 34 (18 males and 16 females). The stillbirth rate for the year was 12 per 1,000 live and stillbirths.

Year	Live Birth Rate (per 1000 population) Dundee	Scotland	Illegitimate Rate (per 100 live births) Dundee	Scotland	Stillbirth Rate (per 1000 tot. births) Dundee	Scotland
1966	18.2	18.6	9.8	6.4	11	16
1967	18.0	18.6	11.8	6.9	11	16
1968	18.0	18.3	11.8	7.4	11	15
1969	16.9	17.4	10.1	7.5	9	14
1970	16.1	16.8	10.3	7.7	12	14

Notification of Births

	Premature	Mature	Total
Live Births ...	217 (288)	2682 (3739)	2899 (4027)
Stillbirths ...	19 (24)	12 (24)	31 (48)
	236 (312)	2694 (3763)	2930 (4075)

8.1% of all births were notified as premature as compared with 7.7% in 1969. Figures in brackets refer to 1969.

Classification of Notified Births According to Place of Confinement

Home	1966	1967	1968	1969	1970
Doctor and/or Midwife	180	144	104	78	69
Unattended	—	1†	—	—	—
	180 (4.3%)*	145 (3.5%)†	104 (2.4%)	78 (1.9%)	69 (2.4%)
Institution					
Royal Infirmary	2,013	2,033	2,113	2,037	1,476
Maryfield Hospital	1,834	1,880	1,941	1,895	1,383
King's Cross Hospital	1	—	—	—	—
Clement Park	115	107	88	57	1
Other Nursing Homes	33	24	17	8	1
	3,996 (95.7%)	4,044 (96.5%)	4,159 (97.6%)	3,997 (98.1%)	2,861 (97.6%)
	4,176 (100%)	4,189 (100%)	4,263 (100%)	4,075 (100%)	2,930 (100%)

*This includes 18 women booked for hospital confinement whose babies were born before admittance to hospital. This remains true for all figures relating to doctor and/or midwife and is the reason for any difference in the following tables.

†Stillborn child found in refuse bin in February, 1967.

Classification of Births of Dundee Women According to Place of Confinement

Year	Total Births and Stillbirths	Institutional Confinements Totals	Institutional Confinements Percentage	Domiciliary Confinements Totals	Domiciliary Confinements Percentages
1966	3,304	3,127	94.6	177	5.4
1967	3,289	3,148	95.7	141	4.3
1968	3,256	3,155	96.9	101	3.1
1969	3,080	3,003	97.5	77	2.5
1970	2,930	2,861	97.6	69	2.4

Place of Confinement for the Years 1966-1970 Inclusive

Home	1966	1967	1968	1969	1970
Doctor and/or Midwife	177	140	101	77	69
Unattended	—	1	—	—	—
	177 (5.4%)	141 (4.3%)	101 (3.1%)	77 (2.5%)	69 (2.4%)
Institution					
Royal Infirmary	1,565	1,581	1,556	1,478	1,476
Maryfield Hospital	1,529	1,538	1,582	1,508	1,383
King's Cross Hospital	1	—	—	—	—
Clement Park and other Nursing Homes	32	29	17	17	2
	3,127 (94.6%)	3,148 (95.7%)	3,155 (96.9%)	3,003 (97.5%)	2,861 (97.6%)
	3,304 (100%)	3,289 (100%)	3,256 (100%)	3,080 (100%)	2,930 (100%)

Domiciliary Midwifery Service: During the year 1970, 1,178 women were attended by domiciliary midwives (this figure includes 1,101 early hospital discharges), and of these 50 were delivered at home.

Month of pregnancy at time of booking									Emergency Cases	Total
1	2	3	4	5	6	7	8	9		
—	3	10	9	15	7	6	2	1	—	53

Bookings by Trimesters for Domiciliary Midwifery Services

	1st Trimester	2nd Trimester	3rd Trimester	Total
1966 ...	22 (13.8%)	97 (60.6%)	41 (25.6%)	160
1967 ...	13 (10.3%)	89 (70.6%)	24 (19.1%)	126
1968 ...	13 (15.1%)	60 (69.8%)	13 (15.1%)	86
1969 ...	13 (19.7%)	35 (53.0%)	18 (27.3%)	66
1970 ...	13 (24.5%)	31 (58.5%)	9 (17.0%)	53

Domiciliary Bookings: All women who wish to engage a domiciliary midwife under section 23 (2) of Part III of the National Health Service (Scotland) Act, 1947, are asked to apply in the first instance at the Central Clinic, 1 Nelson Street, and 330 women attended for this purpose during the year (63 for home confinement and 267 for booked early hospital discharge). Initial advice and information is supplied as necessary at this time. No cases are accepted for domiciliary confinement unless a practitioner providing maternity services has been retained by the patient. Thereafter, professional attention is provided by the doctor and the midwife working in co-operation.

Administration of Analgesics: All the local authority's midwives are qualified to administer analgesia. During the year 37 women received entonex and 23 received pethedine.

Visits paid by Midwives: 1,328 ante-natal (including intra-natal) visits and 8,841 post-natal visits were paid by midwives during the year. Details, and comparative figures are as follows:—

	1966	1967	1968	1969	1970
Ante-natal (including intra-natal visits)	3,002	2,367	2,080	1,453	1,328
No. of births attended	161*	128†	86	66	53
Post-natal visits	5,812	6,077	6,250	6,411	8,841

*Includes one set of twins †Includes two sets of twins

Medical Assistance: In accordance with statutory requirements, the midwives summon medical assistance whenever abnormality or illness becomes evident to them while attending a patient. The following table provides the requisite details for 1970 and comparative over the preceding four years.

	1966	1967	1968	1969	1970
In ante-natal period	45	36	21	13	19
During Labour	8	8	4	5	3
In puerperium—					
For mother	4	2	4	8	14
For child	11	5	1	2	5
	68	51	30	28	41

Midwives (Scotland) Act, 1951: Under the above Act, the local authority has a supervisory function as regards the practice of midwifery in its area; midwives intending to practise must notify the local authority of their intention to do so each year; during the year under review, 90 such notifications were received. All other notifications were received in accordance with the rules of the Central Midwives Board for Scotland (Midwives (Scotland) Act, 1951).

In pursuit of the local authority's statutory function under the Nursing Homes Registration (Scotland) Act of 1938, the medical staff carried out the visitation of two maternity homes in the area during the year.

As is the usual practice, two midwives attended a Refresher Course during the year.

Supply of Maternity Outfits: Every expectant mother who is to be confined at home and who is making use of the arrangements for expectant mothers under the National Health Service, is entitled to be supplied with a maternity outfit free of charge. These outfits contain the main dressings required at the confinement and during the year 59 maternity outfits were issued.

Layettes: Layettes are issued to necessitous cases and are provided free of charge for babies of mothers who are not entitled to receive maternity benefit. During the year 9 layettes were issued.

Stillbirths: As already stated, the stillbirth rate was 12 per 1,000 births. 34 infants (18 males and 16 females) were registered as stillborn and 20 (58.5%) were premature. During 1970, 32 (94.1%) stillbirths occurred in institutions.

Comparison of Dundee Stillbirth Rates with other Stillbirth Rates in Scotland
(Rates per 1,000 Births)

	1966	1967	1968	1969	1970
Scotland	16	16	15	14	14
Glasgow	20	18	17	16	17
Edinburgh	13	15	15	11	12
Aberdeen	10	8	10	11	12
Dundee	11	11	11	9	12

Causes of Pre-Natal Deaths

Males—18 Females—16 Total—34

		Total
1. **Causes in Mother**		
Accidental and other ante-partum haemorrhages	8	
Toxaemia	1	
Abnormalities of placenta (insufficiency, infarction, etc.) ...	7	
Other cases	1	
	——	17
2. **Difficulties in Labour**		
Cord entanglement	1	
Prolapsed Cord	2	
	——	3

Brought forward		20
3. Foetal Anomalies and Deformities		
Anencephaly	4	
Hydrocephalus	2	
Hydrops Foetalis	1	
		7
4. Ill-Defined or Unknown Cause		
Asphyxia	4	
Prematurity	3	
		7
		34

Analysis of Stillbirths according to Place of Delivery, Social Class, etc.

Place of Delivery	Number of Notified Dundee Births and Stillbirths	Number of registered Dundee Stillbirths
Institution		
Royal Infirmary	1,476	11
Maryfield Hospital	1,383	21
Nursing Homes	2	—
Home	69	2
	2,930	34

Social Class

	I. & II.	III.	IV. & V.	Total
No. of Stillbirths	3	9	22	34
Percentage of Deaths in each Social Class	6.2	28.1	65.7	100.00
Percentage of population in each Social Class (Dundee)	13.1	51.1	35.8	100.00

Causes of Neo-Natal Death

	0-1 day	1-2 days	2-3 days	3-4 days	4-7 days	1-2 weeks	2-3 weeks	3-4 weeks	Total
Other causes of Perinatal Mortality ...	2	1	—	—	—	—	—	—	3
Birth Injury, Difficult Labour, and other Anoxic and Hypoxic Conditions ...	8	1	1	1	2	1	—	—	14
Pneumonia	—	1	—	—	—	—	—	—	1
Congenital Anomalies of Circulatory System	—	1	—	—	1	—	—	—	2
Congenital Anomalies of Nervous System	1	—	—	—	—	2	1	—	4
Other Congenital Anomalies	1	—	—	—	1	1	—	—	3
Enteritis and other Diarrhoeal Diseases	—	—	—	—	—	1	—	—	1
	12	4	1	1	4	5	1	—	28

Comparison of Neo-natal and Infant Mortality rates with National Rate and with other Scottish Cities

Year	Scotland		Glasgow		Edinburgh		Aberdeen		Dundee	
	I.M.	Neo-natal	I.M.	Neo-natal	I.M.	Neo-natal	I.M.	Neo-natal	I.M.	Neo-natal
1966 ...	23	15	30	19	22	15	15	10	18	13
1967 ...	21	14	25	16	21	15	23	16	19	11
1968 ...	21	13	26	15	19	12	19	12	18	13
1969 ...	21	14	27	16	22	16	17	11	20	13
1970 ...	20	13	23	13	19	13	15	10	14	10

Causes of Death of Children aged 4 weeks—12 months

	4 wks.- 2 mths.	2-3 mths.	3-6 mths.	6-9 mths.	9-12 mths.	Total
Pneumonia	—	—	1	—	—	1
Other diseases of respiratory System	—	1	2	—	—	3
Malignant neoplasm of Lymphatic and Haematopoietic tissue	—	—	1	—	—	1
Enteritis and other Diarrhoeal Diseases	—	—	2	—	—	2
Other congenital Anomalies ...	—	—	—	1	—	1
Accidents in the home	—	2	1	—	1	4
	—	3	7	1	1	12

Analysis of Neo-Natal Deaths according to Place of Delivery

Place of Delivery	No. of Notified Dundee live births	No. of Dundee neo-natal deaths
Institution		
Royal Infirmary	1,466	13
Maryfield Hospital	1,363	15
Nursing Homes	2	—
Home		
Doctor and/or Midwife (includes born before arrival at hospital	67	—
	2,898	28

Of 28 mothers whose babies died in the neo-natal period, 14 were gainfully employed during their pregnancy; of these 7 (50.0%) had premature deliveries. 14 mothers were not employed apart from home duties and 10 (71.4%) had premature babies.

Analysis of Neo-natal Deaths and Deaths of Children aged 4 weeks to 12 Months According to Social Class

	Class I. and II.	Class III.	Class IV. and V.	Total
Percentage of Dundee Population in each Social Class	13.1	51.1	35.8	100.00
No. of neo-natal deaths	2	12	14	28
Percentage of neo-natal deaths in each Social Class	7.2	42.8	50.0	100.00
No. of deaths aged 4 wks. to 12 mths. ...	1	3	8	12
Percentage of deaths aged 4 wks. to 12 mths. in each Social Class	8.5	25.5	66.0	100.00

Deaths of Children between one year and five years: In addition to deaths of children under one year of age, 11 deaths of children (8 males and 3 females) aged from one year to five years were noted by the Department.

Cause of Death	Males	Females
Malignant Neoplasm	1	—
Diabetes Mellitus	—	1
Pneumonia	2	—
Other Respiratory Disease	—	1
Congenital Anomalies of Nervous System ...	1	—
Congenital Anomalies of Circulatory System	1	—
Accidents in the home	2	—
Other Violence	1	1
	8	3

Ante-natal Clinics: As previously, ante-natal clinics administred by the local authority are held once a week in three centres, namely Ancrum Road, Lochee; Brook Street, Broughty Ferry; and Balmoral Avenue, Douglas and Angus. The Eastern Regional Hospital Board provide the medical staff and health visitors provide nursing staff. The Regional Hospital Board also conduct their own ante-natal clinics at Dundee Royal Infirmary and Maryfield Hospital. A health visitor attends hospital ante-natal clinics thus providing a liaison between the hospital, and the local authority's Child Health Services; there is also an arrangement whereby patients booked for hospital confinement may for convenience attend the local authority's clinics, and domiciliary cases may attend hospital clinics.

Attendances at Local Authority Ante-natal and Post-natal Clinics: 385 women attended for ante-natal examination while 159 attended for post-natal examination. 570 women made 2,256 attendances at combined mothercraft/relaxation classes.

Infant and Child Welfare Clinics: The following table shows the attendances made at Child Welfare Clinics during the year.

Children born 1970	11,791
Children born 1969	10,351
Children born 1968-65	7,563

Attendances of Children at Child Welfare Centres

Year	New Cases 0-1 Year	New Cases 1-5 Years	New Cases Total	Attendances 0-1 Year	Attendances 1-5 Years	Attendances Total
1966 ...	2,701	814	3,515	22,989	9,580	32,569
1967 ...	2,698	524	3,222	24,434	9,582	34,016
1968 ...	2,644	582	3,226	20,302	9,001	29,303
1969 ...	2,713	617	3,330	20,299	10,040	30,339
1970 ...	1,831	1,133	2,964	11,791	17,914	29,705

309 (16.9%) of the 1,831 children under one year and 116 (10.29%) of the 1,133 children between one and five years attending the clinics for the first time showed defects.

Mothercraft Classes: Classes in this subject were continued during the year in peripheral clinics (Hawkhill, Ancrum Road, Broughty Ferry) in addition to the existing facilities at Nelson Street.

Year	No. of sessions	No. of women attending	No. of attendances
1966	187	479	1,914
1967	188	467	2,449
1968	186	606	2,913
1969	187	625	3,212
1970	180	570	2,256

Ear, Nose and Throat Clinic: There is a monthly session at Nelson Street when the services of a consultant are available. During the year 4 children between the ages of one and five years attended this clinic for the first time, and a total of 4 visits were made.

Immunisation at Child Welfare Clinics: The following is a list of immunisation given at Child Welfare Clinics during the year 1970:—

Triple Antigen (Primary)	1,464
Triple Antigen (Maintenance)	933
Poliomyelitis (Sabin)	1,381
Smallpox	787
Measles	1,329

Home Visitation by Health Visitors: During the year 1970, Health Visitors made 78,199 visits to mothers and children under 5 years of age, a decrease of 1,298 over the previous year's figure.

Home Visitation by Health Visitors

	1966	1967	1968	1969	1970
Ante-natal visits	9,631	10,388	8,992	8,308	7,819
Post-natal visits	3,819	3,837	3,817	3,890	3,969
Visits to children under 1 year ...	19,390	21,263	19,096	18,580	17,820
Visits to children between 1-5 years	47,977	52,456	48,529	48,719	48,591
	80,817	87,944	80,434	79,497	78,199

Nursing Homes Registration (Scotland) Act, 1938: Six nursing homes are registered in terms of this Act.

Foster Children, Adopted and Illegitimate Children: The Health Visitors act in co-operation with the Social Work Department in the supervision of, and any necessary investigations into, the health of such children and those who care for them.

ASCERTAINMENT AND MANAGEMENT OF DEAFNESS IN CHILDREN

Statistical Data:—

	Total Number of Children Screened for Deafness	—		2,660
A.	Number of children screened on district by health visitors and found to have normal hearing (92% of whom were aged 7 months to 2 years)	=		2,622
B.	Number of children referred for first time to specialist medical officer for further tests (14 by health visitors, 13 by medical officers, and 1 by general practitioner) Eight of this group were referred to Otologist for opinion.	=		28
	These 28 children on further testing showed:—			
(1)	**Normal hearing response:** (Including 1 with family history of deafness, 1 backward child now in a day nursery, and 2 with indistinct speech referred for speech therapy and playgroup)	=	21	28
(2)	**Adequate hearing for Speech Establishment but not 100%:** (Including 1 child with unilateral absence of auditory meatus, all still under review by otologist)	=	3	
(3)	**Moderate hearing loss** (Conductive): (1 child showed improvement in hearing following adenoid removal, and the other improved after myringotomy)	=	2	
(4)	**Severe congenital deafness requiring Special Education later:** (Both were confirmed as severely deaf at the Speech and Hearing Clinic, Dundee Royal Infirmary, and parents are receiving guidance by Deaf School headmistress)	=	2	
C.	**Children reviewed from former years:** (2 children with unilateral absence of auditory meatus are speaking well, one being in a nursery school. 4 children with normal hearing and indistinct speech are improving with speech therapy and/or playgroup. 2 backward children have been found to have normal hearing, 1 attending speech therapist and 1 nursery school. 2 backward children have been found to have some hearing loss, 1 being admitted to Liff Observation Unit and the other doing reasonably well in nursery school)	=		10
	TOTAL	=		2,660

To Sum Up:—

I.	Number of children found to have normal hearing	=	2,649	(99.59%)
II.	Number of children found to have adequate hearing for speech establishment	=	5	(0.19%)
III.	Number of children found to have moderate conductive deafness, requiring treatment	=	4	(0.15%)
IV.	Number of children found to have severe hearing loss, requiring special education later	=	2	(0.07%)
	TOTAL	=	2,660	(100.00%)

COMBINED ASSESSMENT COMMITTEE ON DEAFNESS
held at
SPEECH and HEARING CLINIC, D.R.I., 1970

This team comprising Otologist, Headmistress of Deaf School, Educational Psychologist, Paediatric Registrar, Speech Therapist and Specialist Medical Officer who visits the Deaf School and supervises the screening of under-fives in the City, met for 43 hourly sessions during the year. For a few sessions a Child Psychiatrist also attended.

Statistical Data:—

New Cases	85	(56 being Dundee children)
Review Cases	178	(136 being Dundee children)
Deaf School Children—First visit	8	(4 being Dundee children)
Subsequent visits	21	(11 being Dundee children)
TOTAL	292	(207 being Dundee children)

Deaf School Children:—

During the year 6 deaf children were admitted to the School and 2 children were transferred to ordinary schools. Intensive speech therapy at Dundee Royal Infirmary was instituted for 4 children who were not progressing sufficiently with speech. 1 child was recommended group elocution classes, which mother arranged privately. Adenoidectomy was carried out for 1 child who developed a superadded conductive hearing loss. Ear exploration was tried out for 1 boy and his left stapes "mobilised" but unfortunately without improvement in his hearing. Desensitisation, however, improved his allergic rhinitis. Another child is awaiting ear exploration. 3 children who have reached a good level of speech and education may be transferred to ordinary schools in 1971. 1 girl with high-tone deafness and reasonably good speech has been found to be well below par mentally, and may require to be admitted to a mentally retarded unit in 1971. Her hearing loss does not warrant deaf school tuition and is not her primary handicap. 1 boy with a moderate hearing loss was admitted from Fairmuir School, Dundee, and is making very good progress in class.

Other Children—Recommendations:—

Commercial Aids	3	(1 child being from Blind School)
Linco Speech Training Set ...	1	
Tonsil and/or Adenoid removal, myringotomy, grommet tube insertion, etc.	13	
Medresco Hearing Aid and to sit at front of class in school	11	
Admission to Nursery School or Day Nursery	3	
Speech Therapy	18	
Referral to Psychiatrist ...	4	
Awaiting Deaf School later and receiving guidance from Deaf Teacher	4	

Ex-Deaf School Children, now at ordinary schools:—

3 were reviewed and found to be progressing satisfactorily.

School Health Service

1. **General Statistics**

Population of the Area	181,508
(Register General's Returns 30/6/70)	
1. Number of schools under Management of the Education Authority.	
(a) Infant Schools	4
(b) Primary Schools	48
(c) Secondary Education:—	
(i) Three and Four Year Courses	5
(ii) Five and Six Year Courses	7
(d) Pre-Vocational Training	2
(e) Schools for Handicapped Children	4
(f) Junior Occupational Centre	1
(g) Nursery Schools	9
(h) Nursery Classes in Primary Schools	6
2. In receipt of grant from Education Authority and by arrangement for medical inspection.	
Primary and Secondary	1
3. Under Dundee College of Education Board of Governors and by arrangement for medical inspection.	
(a) Primary Schools	1
(b) Nursery classes	2
4. Under Private Management and not under medical inspection.	
(a) Primary and Secondary Education	1
(b) Nursery Schools	—
Number of Children on registers	34,700

2. Sanitary Conditions in Schools

Description of School	Total No. of Schools	Open and no Washing Facilities	Covered and no Washing Facilities	No Washing Facilities
1. **Number of Schools under Management of the Education Authority—**				
(a) Infant Schools ...	4	—	1 (25.0%)	—
(b) Primary Schools ...	48	2 (4.1%)	14 (29.1%)	—
(c) Secondary Schools —				
(1) Four Year Secondary Schools ...	5	—	—	—
(2) Six Year Senior and Comprehensive Schools ...	7	—	—	—
(d) Schools for Handicapped Children ...	4	1 (25.0%)	—	—
(e) Junior Occupational Centre	1	—	—	—
(f) Nursery Schools ...	9	—	—	—
(g) Nursery Classes in Primary Schools ...	6	—	—	—
2. **In receipt of grant from Education Authority and by arrangement for Medical Inspection—**				
Primary and Secondary ...	1	—	—	—
3. **Under Dundee College of Education Board of Governors and by arrangement for Medical Inspection—**				
(a) Primary Schools ...	1	—	—	—
(b) Nursery Classes ...	2	—	—	—
4. **Under private management and not under Medical Inspection—**				
(a) Primary and Secondary Education ...	1	—	—	—
	89	3 (3.3%)	15 (16.8%)	—

The Education Authority is steadily implementing a decision made to modernise and generally improve sanitary facilities in elderly schools; this includes such improvements as heating of outside playground toilets and the provision of roofs where applicable in addition to the replacement of fittings and the provision of more where this was indicated.

Inevitably, some limitations are imposed by the problems of space but the most effective compromise has been sought in every such case.

Staff Statistics

Staff	Full-Time	Part-Time	Whole-Time Equivalent for School Health Services	Number of Children per Person
Medical Officers ...	7	5	5	6,000
Health Visitors and Nurses	50	22	22	1,365
Other Staff	13	—	6	5,000

3. Organisation and Administration

(a) System and Extent of Medical Inspection and Treatment

The groups of children prescribed for systematic medical inspection for the year ended 31st July, 1970, were—

1. Entrants, i.e. children born in 1965.
2. Children born in 1957.
3. Children born in 1963 (vision and hearing only).

Summary in terms in sessions, of the Work of the Medical Officers.

Systematic Medical Inspection	506
For the purpose of Immunisation	98
For medical examination of pupils before final acceptance for residence in Belmont Camp School and other Special Examinations ...	214
Nursery Schools and Classes	76
Consultation Clinic Sessions	443
Sessions spent at Lectures, D.R.I. and other duties	246
Clerical Work	777

Special Examinations by Medical Officers,
Other than those included in Table I.

Children examined for Auchterhouse Holiday Home	293
Applicants for licences for employment	386
Examinations in Remand Home	270

Immunisation: Diphtheria and Tetanus:

No. Examined	2,837
Primary Diphtheria/Tetanus	184
Boost Diphtheria/Tetanus	1,907
Boost Diphtheria	12
Primary Tetanus	—

It should be explained that the discrepancy between the number examined and the number immunised will mainly include children whom the parents intend to be immunised by the family doctor as necessary.

Immunisation against Poliomyelitis: A total of 2,695 school children received appropriate immunisation against this disease; of these 149 completed a primary course, and 2,546 received a maintenance dose.

Tuberculosis—B.C.G. Vaccination: This well established procedure follows a routine course each year. The figures for the session 1969/70 are—

B.C.G. Vaccination was offered to	3,384	pupils	
accepted by	3,119	„	(92.4%)
refused by	59	„	
Heaf Test was given to	2,957	„	
Positive reaction	366	„	(12.4%)
Negative reaction ...	2,541	„	
B.C.G. Vaccination was given to	2,541	„	

Vaccination/Immunisation for School Children going on Organised Continental Holidays

	Boys	Girls	Total
Smallpox	76	103	179
Typhoid-paratyphoid	438	476	914

(b) **Further Educational Establishments:** Regular visits were paid by one of the Medical Officers of the Department to give advice as necessary regarding the general health of students.

(c) **School Nursing and Arrangements for Follow-up:** A statistical summary of the work done by Health Visitors and School Nurses is shown in the following table—

Sessions on Medical Inspection	758
Sessions on Immunisation in Schools	1,376
Additional Visits to Schools	2,910
Nursery Schools	111
Sessions at Consultation and Treatment Clinics ...	425

Visits to homes by Health Visitors

Of School Age Children in connection with Infectious Diseases	826
Of School Age Children concerning T.B. infection and contact	122
Of School Age Children for other reasons (including those following medical inspection in school) ...	1,241

(d) **Co-ordination with other Departments of the Authority, with voluntary associations, and others concerned with the welfare of children:** As in previous years, a harmonious relationship has been maintained with other departments and voluntary organisations, to our mutual benefit.

4. **Audiometric Survey:** The number of children with defective hearing on the register at 30th June, 1970, was 153 classified as follows—

	Grades			
	I.	IIa.	IIb.	Totals
Girls	39	31	12	82
Boys	33	27	11	71
	72	58	23	153

AUDIOMETRIC SURVEY

Summary for Session 1969/70

	Audiometric Sweep Tests							
	Number examined		Number passing		Number failing both ears		Number failing one ear	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
FIRST	1,884	1,762	1,882	1,757	2	2	—	3
Re-tests	1,055	1,042	1,053	1,041	—	—	2	1
INTERMEDIATE ...	1,664	1,619	1,660	1,615	3	1	1	3
Re-tests	186	179	185	177	1	—	—	2
Other Groups	151	161	103	112	28	28	20	21
Special Referrals	224	136	210	115	6	11	8	10
TOTAL SWEEPS ...	3,548	3,381	3,542	3,372	5	3	1	6
TOTAL RE-TESTS ...	1,616	1,581	1,551	1,445	35	39	30	34

Medical Treatment

Consultation Clinic Attendances

	Pre-School Children Cases	Pre-School Children Attendances	School Children Cases	School Children Attendances
(a) Minor Ailments (Consultation Clinic staffed by Dr.)				
1969	32	50	2,451	4,138
1970	40	80	1,679	3,489
(b) Treatment Clinics (Dressing Clinics staffed by Nurse)				
1969	Not treated	—	1,040	4,090
1970	Would be referred to Dr. at Child Welfare Clinic		694	2,990
(c) Scabies Treatment Centre (Mains Loan Baths)				
1969	30	73	203	498
1970	41	81	277	649
(d) Ear, Nose and Throat (Nelson Street Clinic)				
1969	7	2	63	83
1970	4	—	94	109
(e) Dundee Eye Institution (School Eye Service)				
1969	—	—	468	2,310
1970	—	—	277	2,061
(f) Orthoptic				
1969	67	368	165	1,662
1970	62	489	203	1,884

Dental Inspection and Classes: See separate report by the Chief Dental Officer.

Special Schools and Classes

(a) Fairmuir School (physically and mentally handicapped)

	Boys	Girls	Total
On roll at 31/7/69	211	150	361
Admitted during year	30	28	58
Removed from register	46	36	82
On roll at 31/7/70	195	142	337

(b) Coldside Occupational Centre

	Boys	Girls	Total
On roll at 31/7/69	64	43	107
Admitted during year	9	10	19
Removed from register	11	4	15
On roll at 31/7/70	62	49	111

(c) Sight Saving School

	Boys	Girls	Total
On roll at 31/7/69	7	3	10
Admitted during year	1	1	2
Removed from register	1	—	1
On roll at 31/7/70	7	4	11

(d) School for the Deaf

	Boys	Girls	Total
On roll at 31/7/69	31	29	60
Admitted during year	1	1	2
Removed from register	8	4	12
On roll at 31/7/70	24	26	50

Residential Special Educational Treatment provided for Dundee children

	On roll at 31/7/69		Admitted 1969-70		Dis-charged 1969-70		On roll at 31/7/70	
	B.	G.	B.	G.	B.	G.	B.	G.
Bleasdale House, Lancashire	1	—	—	—	—	—	1	—
Corsbie Hall, Wigtownshire	5	5	3	—	1	2	7	3
Crowthorne School, Bolton	—	1	—	—	—	—	—	1
Friends' School, Wigtown	1	—	—	—	—	—	1	—
Garvald, Peeblesshire	1	—	1	—	—	—	2	—
Harmeny House, Midlothian	5	1	2	—	—	—	7	1
Kilquhanity House, Castle Douglas	1	—	—	—	—	—	1	—
Lendrick Muir, Rumbling Bridge, Kinross	7	5	—	—	3	5	4	—
Moor House, Surrey	—	—	1	—	1	—	—	—
Ochil Towers, Auchterarder	2	—	—	1	1	—	1	1
Orchardin House, Castle Douglas	—	—	1	—	1	—	—	—
Ovenstone House, Pittenweem	—	—	1	—	—	—	1	—
Quarriers Homes, Carsemeadow School, Bridge of Weir	—	—	1	—	—	—	1	—
Royal Blind School, Edinburgh	2	1	1	—	—	—	3	1
Rudolph Steiner School, Aberdeen	1	1	—	1	—	—	1	2
Stanmore House, Lanark	1	1	1	—	—	—	2	1
Trefoil School, Edinburgh	1	1	—	—	—	—	1	1
Westerlea School, Edinburgh	1	—	—	—	—	—	1	—
	29	16	12	2	7	7	34	11

MEDICAL EXAMINATIONS BY EACH EDUCATION AUTHORITY

1969-70

	ENTRANTS						LEAVERS					
	No. of Examinations		No. With Defects		Percentage With Defects		No. of Examinations		No. With Defects		Percentage With Defects	
Local Authority	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Aberdeen Burgh	**1,340**	**1,271**	**794**	**704**	**59.25**	**55.39**	—	—	—	—	—	—
Dundee	**1,418**	**1,558**	**722**	**745**	**50.92**	**47.82**	**1,377**	**1,171**	**698**	**594**	**50.69**	**50.73**
Edinburgh	**3,359**	**3,052**	**2,041**	**1,736**	**60.76**	**56.88**	**2,511**	**2,449**	**1,148**	**1,029**	**45.72**	**42.02**
Scotland excluding Glasgow	**36,952**	**34,974**	**20,812**	**17,806**	**56.32**	**50.91**	**25,473**	**25,187**	**11,709**	**11,086**	**45.97**	**44.02**
Aberdeen County	1,171	1,097	627	509	53.54	46.40	960	919	357	356	37.19	38.74
Angus	800	746	397	371	49.63	49.73	638	565	227	217	35.58	38.41
Argyll	384	397	283	277	73.70	69.77	354	339	213	175	60.17	51.62
Ayr County	2,925	2,711	1,531	1,324	52.34	48.84	2,083	2,228	928	934	44.55	41.92
Banff	326	300	201	158	61.66	52.67	358	332	147	126	41.06	37.95
Berwick	154	156	65	51	42.21	32.69	139	144	52	54	37.41	37.50
Bute	92	94	56	41	60.87	43.62	91	87	48	43	52.75	49.43
Caithness	296	294	93	104	31.42	35.37	220	204	62	81	28.18	39.71
Clackmannan	356	359	107	85	30.06	23.68	300	289	96	110	32.00	38.06
Dumfries County	683	663	478	430	69.99	64.86	629	584	351	321	55.80	54.97
Dunbarton	2,275	2,237	1,312	1,221	57.67	54.58	1,458	1,377	672	592	46.09	42.99
East Lothian	482	458	294	253	61.00	55.24	461	371	239	180	51.84	48.52
Fife	2,712	2,590	1,460	1,258	53.83	48.57	1,121	1,199	673	512	60.04	42.70
Inverness County	770	745	553	470	71.82	63.09	659	648	277	265	42.03	40.90
Kincardine	205	223	133	116	64.88	52.02	153	161	33	74	21.57	45.96
Kirkcudbright	118	101	98	75	83.05	74.26	—	—	—	—	—	—
Lanark	6,120	5,742	3,635	3,020	59.40	52.59	4,382	4,201	2,207	2,055	50.37	48.92
Midlothian	1,194	1,154	626	568	52.43	49.22	970	802	394	337	40.62	42.02
Moray and Nairn	530	534	221	186	41.70	34.83	404	391	142	130	35.15	33.25
Orkney	139	122	82	61	58.99	50.00	98	121	23	31	23.47	25.62
Peebles	107	94	51	40	47.66	42.55	84	75	25	23	29.76	30.67
Perth and Kinross	1,094	933	490	327	44.79	35.05	822	810	267	280	32.48	34.57
Renfrew	3,631	3,343	2,051	1,658	56.49	49.60	2,383	2,621	1,171	1,298	49.14	49.52
Ross and Cromarty	545	530	310	286	56.88	53.96	417	426	183	195	43.88	45.77
Roxburgh	330	271	198	143	60.00	52.77	252	262	120	122	47.62	46.56
Selkirk	160	148	49	39	30.63	26.35	183	174	71	56	38.80	32.18
Stirling County	1,791	1,653	1,151	925	64.27	55.96	1,160	1,130	521	522	44.91	46.19
Sutherland	112	121	49	57	43.75	47.11	110	95	45	38	40.91	40.00
West Lothian	1,042	1,013	496	430	47.60	42.45	477	773	236	254	49.48	32.86
Wigtown	231	199	152	131	65.80	65.83	187	210	71	77	37.97	36.67
Zetland	60	65	6	7	10.00	10.77	32	29	12	5	37.50	17.24

TABLE II.

NUMBERS AND RATES OF DEFECTS FOUND PER 100,000 CHILDREN EXAMINED

DUNDEE

1969-70

	Defect	ENTRANTS				LEAVERS			
		Boys		Girls		Boys		Girls	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate
Molluscum	02	—	—	—	—	3	218	1	85
Verruca	03	14	987	13	834	37	2,687	25	2,135
Epidermophytosis	04	—	—	—	—	6	436	1	85
Pediculosis	05	26	1,834	35	2,246	20	1,452	27	2,306
Scabies	06	7	494	2	128	9	654	11	939
Other Infections	07	8	564	10	642	4	290	5	427
Neoplasms	08	4	282	3	193	3	218	—	—
Diabetes	11	—	—	—	—	3	218	1	85
Underweight	12	4	282	9	578	5	363	6	512
Obesity	13	2	141	21	1,348	45	3,268	50	4,270
Other Endocrine Nutritional Metabolic Disorders	14	3	212	2	128	4	290	1	85
Anaemia and other Blood Disorders	16	6	423	6	385	2	145	—	—
Speech Disorders	18	56	3,949	34	2,182	16	1,162	4	342
Enuresis	19	83	5,853	70	4,493	21	1,525	9	769
Behaviour Disorder	20	26	1,834	20	1,284	15	1,089	10	854
Borderline Mental Retardation	21	12	846	3	193	12	871	3	256
Mild Mental Retardation	22	1	71	1	64	6	436	2	171
Moderate Mental Retardation	23	3	212	2	128	7	508	3	256
Severe Mental Retardation	24	—	—	1	64	1	73	—	—
Unspecified Mental Retardation	26	2	141	2	128	—	—	—	—
Epilepsy	27	2	141	3	193	5	363	2	171
Other Diseases of Nervous System	28	1	71	3	193	9	654	2	171
Inflammatory Condition of Eye	29	27	1,904	16	1,027	27	1,961	14	1,196
Refractive Error	30	16	1,128	15	963	144	10,458	170	14,518
Strabismus	31	34	2,398	46	2,953	17	1,235	9	769
Colour Blindness	32	1	71	—	—	80	5,810	—	—
Blindness—Both Eyes	33	—	—	1	64	—	—	—	—
—Both Eyes Not Specified	34	—	—	1	64	1	73	—	—
Blindness—One Eye Not Specified	36	—	—	1	64	1	73	1	85
Other Eye Condition	37	1	71	—	—	7	508	1	85
Inflammatory Condition of Ear	38	11	776	18	1,155	11	799	5	427
Wax In Ear	39	17	1,199	29	1,861	2	145	24	2,050
Other Conditions Affecting Ear	40	2	141	1	64	6	436	4	342
Deafness One Ear Partial or Other	43	—	—	—	—	1	73	—	—
Deafness One Ear	44	4	282	—	—	1	73	5	427
Impairment of Hearing One or Both Ears	45	5	353	4	257	14	1,017	7	598
Chillblains	46	—	—	—	—	—	—	1	85
Organic Disease of Heart and Blood Vessels	48	2	141	—	—	4	290	1	85
Asthma	49	23	1,622	18	1,155	28	2,033	8	683
Disease of Tonsils	50	87	6,135	97	6,226	23	1,670	41	3,501
Other Diseases of Respiratory System Including Hay Fever	51	79	5,571	60	3,851	64	4,648	30	2,562
Dental Caries	52	75	5,289	112	7,189	70	5,084	57	4,868
Other Diseases of Mouth	53	2	141	4	257	6	436	11	939
Disease of Digestive System	54	3	212	2	128	—	—	—	—
Hernia	55	4	282	15	963	2	145	—	—
Kidney Disease	56	1	71	8	513	3	218	3	256
Disease of Male Genital Organs	57	5	353	—	—	—	—	—	—
Disease of Female Genital Organs	58	—	—	—	—	3	218	12	1,025
Infection of Skin	59	3	212	6	385	12	871	7	598
Eczema	60	17	1,199	26	1,669	6	436	13	1,110
Acne	61	—	—	—	—	35	2,542	58	4,953
Other Diseases of Skin	62	30	2,116	48	3,081	46	3,341	41	3,501
Osteochondrosis	63	2	141	—	—	2	145	2	171
Spinal Curvature	64	3	212	5	321	9	654	2	171
Pes Planus	65	38	2,680	45	2,888	35	2,542	22	1,879
Hallux Valgus	66	—	—	—	—	—	—	9	769
Other Minor Deformities	67	104	7,334	126	8,087	21	1,525	42	3,587
Other Orthopaedic Conditions	68	1	71	2	128	10	726	2	171
Spina Bifida	69	1	71	2	128	—	—	—	—
Other Congenital Anomalies of C.N.S.	71	—	—	—	—	—	—	1	85
Congenital Anomalies of Eye	72	—	—	2	128	6	436	—	—
Congenital Anomalies of Ear, Face, Neck	73	1	71	1	64	—	—	—	—
Congenital Anomalies of Heart	74	4	282	2	128	1	73	—	—
Cleft Palate and Cleft Lip	77	—	—	5	321	—	—	1	85
Other Congenital Anomalies of Upper Alimentary Tract	78	—	—	—	—	1	73	—	—
Other Congenital Anomalies of Digestive System	79	1	71	—	—	—	—	—	—
Congenital Anomalies of Genital Organs	80	82	5,783	—	—	6	436	—	—
Congenital Anomalies of Urinary System	81	—	—	2	128	—	—	3	256
Congenital Clubfoot	82	4	282	7	449	6	436	2	171
Other Congenital Anomalies of Limb System	83	3	212	5	321	4	290	6	512
Other Congenital Anomalies of Muscolo-skeletal System	84	5	353	5	321	3	218	2	171
Congenital Anomalies of Skin, Hair and Nails	85	5	353	4	257	4	290	5	427
Congenital Syndrome Affecting Multiple Systems	87	—	—	1	64	—	—	—	—
Ill Defined Conditions	88	20	1,410	18	1,155	1	73	3	256
Ill Defined Conditions	89	36	2,539	39	2,503	14	1,017	10	854
Injuries	90	4	282	4	257	8	581	8	683

NUMBERS AND RATES OF DEFECTS FOUND PER 100,000 CHILDREN EXAMINED BY SOCIAL CLASS

DUNDEE

1969-70

DEFECT			ENTRANTS SOCIAL CLASS 1	2	3	4	5	Other or Not Stated	Total	LEAVERS SOCIAL CLASS 1	2	3	4	5	Other or Not Stated	Total
Verruca	03	Rate Boys	—	—	2,703	—	9,091	—	2,083	25,000	14,286	5,797	6,250	—	—	5,839
		Rate Girls	—	—	—	—	—	—	—	—	11,111	1,724	—	—	—	1,754
		No. Boys	—	—	2	—	1	—	3	1	2	4	1	—	—	8
		No. Girls	—	—	—	—	—	—	—	—	1	1	—	—	—	2
Epidermophytosis	04	Rate Boys	—	—	—	—	—	—	—	—	—	—	6,250	—	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	1	—	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pediculosis	05	Rate Boys	—	—	1,351	8,696	9,091	—	2,778	—	—	—	—	5,263	—	730
		Rate Girls	—	—	—	—	17,647	—	1,863	—	—	1,724	—	—	7,692	1,754
		No. Boys	—	—	1	2	1	—	4	—	—	—	—	1	—	1
		No. Girls	—	—	—	—	3	—	3	—	—	1	—	—	1	2
Scabies	06	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	5,263	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	1,724	—	—	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	1	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Other Infections	07	Rate Boys	—	—	—	4,348	—	—	694	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	1	—	—	1	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Neoplasms	08	Rate Boys	—	—	—	—	—	—	—	25,000	—	—	—	—	—	730
		Rate Girls	—	—	—	—	5,882	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	1	—	—	—	—	—	1
		No. Girls	—	—	—	—	1	—	1	—	—	—	—	—	—	—
Underweight	12	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	6,667	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	10,000	—	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	1	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Obesity	13	Rate Boys	—	—	—	4,348	—	—	694	—	—	4,348	—	5,263	6,667	3,650
		Rate Girls	8,333	—	—	3,333	—	5,556	1,863	—	11,111	3,448	20,000	—	—	4,386
		No. Boys	—	—	—	1	—	—	1	—	—	3	—	1	1	5
		No. Girls	1	—	—	1	—	1	3	—	1	2	2	—	—	5
Other Endocrine Nutritional Metabolic Disorder	14	Rate Boys	—	—	1,351	—	—	—	694	—	—	1,449	—	—	—	730
		Rate Girls	—	—	1,370	—	—	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	1	—	—	—	1	—	—	1	—	—	—	1
		No. Girls	—	—	1	—	—	—	1	—	—	—	—	—	—	—
Speech Disorder	18	Rate Boys	—	6,667	4,054	—	—	11,111	3,472	—	—	—	6,250	—	—	730
		Rate Girls	—	—	1,370	6,667	—	—	1,863	—	—	—	—	5,000	—	877
		No. Boys	—	1	3	—	—	1	5	—	—	—	1	—	—	1
		No. Girls	—	—	1	2	—	—	3	—	—	—	—	1	—	1
Enuresis	19	Rate Boys	—	13,333	5,405	13,043	—	22,222	7,639	—	—	1,449	6,250	—	—	1,460
		Rate Girls	—	—	6,849	6,667	11,765	11,111	6,832	—	—	1,724	—	—	—	877
		No. Boys	—	2	4	3	—	2	11	—	—	1	1	—	—	2
		No. Girls	—	—	5	2	2	2	11	—	—	1	—	—	—	1
Behaviour Disorder	20	Rate Boys	8,333	—	1,351	4,348	—	—	2,083	—	—	1,449	—	—	6,667	1,460
		Rate Girls	—	—	—	—	—	—	—	—	—	1,724	—	5,000	—	1,754
		No. Boys	1	—	1	1	—	—	3	—	—	1	—	—	1	2
		No. Girls	—	—	—	—	—	—	—	—	—	1	—	1	—	2
Borderline Mental Retardation	21	Rate Boys	—	—	1,351	—	9,091	—	1,389	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	1	—	1	—	2	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Moderate Mental Retardation	23	Rate Boys	—	—	—	—	—	—	—	—	—	2,899	—	—	—	1,460
		Rate Girls	—	—	—	—	—	5,556	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	2	—	—	—	2
		No. Girls	—	—	—	—	—	1	1	—	—	—	—	—	—	—
Epilepsy	27	Rate Boys	—	—	1,351	—	—	—	694	—	—	1,449	—	—	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	1	—	—	—	1	—	—	1	—	—	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases of Nervous System	28	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	—	—	—	730
		Rate Girls	—	—	—	—	—	5,556	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	1	—	—	—	1
		No. Girls	—	—	—	—	—	1	1	—	—	—	—	—	—	—
Inflammatory Conditions of Eye	29	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	5,263	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	1	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refractive Error	30	Rate Boys	—	—	2,703	4,348	—	—	2,083	25,000	7,143	11,594	6,250	10,526	6,667	10,219
		Rate Girls	—	—	1,370	10,000	—	—	2,484	—	11,111	20,690	30,000	15,000	7,692	17,544
		No. Boys	—	—	2	1	—	—	3	1	1	8	1	2	1	14
		No. Girls	—	—	1	3	—	—	4	—	1	12	3	3	1	20
Strabismus	31	Rate Boys	—	—	2,703	8,696	—	11,111	3,472	—	—	4,348	—	5,263	—	2,920
		Rate Girls	—	—	1,370	10,000	—	—	2,484	—	—	3,448	—	—	7,692	2,632
		No. Boys	—	—	2	2	—	1	5	—	—	3	—	1	—	4
		No. Girls	—	—	1	3	—	—	4	—	—	2	—	—	1	3
Colour Blindness	32	Rate Boys	—	—	—	—	—	—	—	25,000	—	1,449	—	—	13,333	2,920
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	1	—	1	—	—	2	4
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Blindness of Both Eyes	33	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	5,882	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	1	—	1	—	—	—	—	—	—	—
Blindness of Both Eyes Not Specified	34	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	5,263	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	1	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Eye Conditions	37	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	—	—	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	1	—	—	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Inflammatory Condition of Ear	38	Rate Boys	—	—	—	—	—	—	—	—	—	4,348	6,250	—	6,667	3,650
		Rate Girls	—	—	1,370	—	—	—	621	—	—	1,724	—	5,000	—	1,754
		No. Boys	—	—	—	—	—	—	—	—	—	3	1	—	1	5
		No. Girls	—	—	1	—	—	—	1	—	—	1	—	1	—	2
Wax in Ear	39	Rate Boys	—	6,667	—	—	—	—	694	—	—	—	—	—	—	—
		Rate Girls	—	9,091	1,370	6,667	—	5,556	3,106	—	—	—	—	—	—	—
		No. Boys	—	1	—	—	—	—	1	—	—	—	—	—	—	—
		No. Girls	—	1	1	2	—	1	5	—	—	—	—	—	—	—
Other Conditions affecting Ear	40	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	5,000	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Deafness One Ear Partial or Other	43	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	6,667	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	1	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Impairment of Hearing One or Both Ears	45	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	6,250	—	—	1,460
		Rate Girls	—	—	2,740	—	—	5,556	1,863	—	—	—	—	5,000	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	1	1	—	—	2
		No. Girls	—	—	2	—	—	1	3	—	—	—	—	1	—	1

TABLE III.—Continued

NUMBERS AND RATES OF DEFECTS FOUND PER 100,000 CHILDREN EXAMINED BY SOCIAL CLASS
DUNDEE
1969-70

DEFECT			ENTRANTS SOCIAL CLASS					Other or Not Stated	Total	LEAVERS SOCIAL CLASS					Other or Not Stated	Total
			1	2	3	4	5			1	2	3	4	5		
Organic Diseases of Heart and Blood Vessels	48	Rate Boys	—	—	—	—	—	—	—	—	—	—	6,250	—	6,667	1,460
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	1	—	1	2
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Asthma	49	Rate Boys	—	13,333	2,703	—	—	—	2,778	—	—	—	—	—	—	—
		Rate Girls	8,333	9,091	1,370	—	5,882	—	2,484	—	11,111	—	—	—	—	877
		No. Boys	—	2	2	—	—	—	4	—	—	—	—	—	—	—
		No. Girls	1	1	1	—	1	—	4	—	1	—	—	—	—	1
Disease of Tonsils	50	Rate Boys	—	6,667	9,459	8,696	—	11,111	7,639	—	—	—	6,250	—	—	730
		Rate Girls	—	—	5,479	6,667	11,765	5,556	5,590	—	—	1,724	—	10,000	—	2,632
		No. Boys	—	1	7	2	—	1	11	—	—	—	1	—	—	1
		No. Girls	—	—	4	2	2	1	9	—	—	1	—	2	—	3
Hay Fever	51	Rate Boys	—	6,667	4,054	4,348	9,091	11,111	4,861	—	—	7,246	6,250	—	—	4,380
		Rate Girls	—	—	5,479	6,667	—	—	3,727	—	—	1,724	—	5,000	—	1,754
		No. Boys	—	1	3	1	1	1	7	—	—	5	1	—	—	6
		No. Girls	—	—	4	2	—	—	6	—	—	1	—	1	—	2
Dental Causes	52	Rate Boys	—	—	4,054	8,696	—	—	3,472	—	—	4,348	—	21,053	—	5,109
		Rate Girls	8,333	—	4,110	—	5,882	—	3,106	—	—	1,724	—	10,000	7,692	3,509
		No. Boys	—	—	3	2	—	—	5	—	—	3	—	4	—	7
		No. Girls	1	—	3	—	1	—	5	—	—	1	—	2	1	4
Other Diseases of Mouth	53	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	25,000	—	1,724	—	—	—	1,754
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	1	—	1	—	—	—	2
Disease of Digestive System	54	Rate Boys	—	—	—	4,348	—	—	694	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	1	—	—	1	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hernia	55	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	—	—	—	730
		Rate Girls	—	—	1,370	—	—	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	1	—	—	—	1
		No. Girls	—	—	1	—	—	—	1	—	—	—	—	—	—	—
Kidney Disease	56	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	1,370	—	—	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	1	—	—	—	1	—	—	—	—	—	—	—
Infection of Skin	59	Rate Boys	—	—	1,351	—	—	—	694	—	—	—	—	5,263	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	3,448	—	—	—	1,754
		No. Boys	—	—	1	—	—	—	1	—	—	—	—	1	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	2	—	—	—	2
Eczema	60	Rate Boys	—	—	1,351	—	—	—	694	—	—	1,449	—	—	—	730
		Rate Girls	—	—	1,370	3,333	—	—	1,242	—	—	1,724	—	—	—	877
		No. Boys	—	—	1	—	—	—	1	—	—	1	—	—	—	1
		No. Girls	—	—	1	1	—	—	2	—	—	1	—	—	—	1
Acne	61	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	—	—	—	730
		Rate Girls	—	—	—	—	—	—	—	25,000	—	5,172	—	5,000	—	4,386
		No. Boys	—	—	—	—	—	—	—	—	—	1	—	—	—	1
		No. Girls	—	—	—	—	—	—	—	1	—	3	—	1	—	5
Other Diseases of the Skin	62	Rate Boys	—	6,667	1,351	—	—	—	1,389	—	—	4,348	—	—	—	2,190
		Rate Girls	—	9,091	2,740	—	—	—	1,863	—	22,222	3,448	—	10,000	7,692	6,140
		No. Boys	—	1	1	—	—	—	2	—	—	3	—	—	—	3
		No. Girls	—	1	2	—	—	—	3	—	2	2	—	2	1	7
Pes Planus	65	Rate Boys	—	—	1,351	4,348	—	—	1,389	—	7,143	4,348	—	5,263	—	3,650
		Rate Girls	—	9,091	2,740	—	—	—	1,863	—	—	1,724	—	—	—	877
		No. Boys	—	—	1	1	—	—	2	—	1	3	—	1	—	5
		No. Girls	—	1	2	—	—	—	3	—	—	1	—	—	—	1
H. Valgus	66	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	11,111	—	—	—	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Other Minor Deformities	67	Rate Boys	8,333	6,667	10,811	4,348	9,091	22,222	9,722	—	—	2,899	6,250	—	—	2,190
		Rate Girls	—	9,091	8,219	6,667	17,647	16,667	9,317	—	—	3,448	—	—	—	1,754
		No. Boys	1	1	8	1	1	2	14	—	—	2	1	—	—	3
		No. Girls	—	1	6	2	3	3	15	—	—	2	—	—	—	2
Other Orthopaedic Conditions	68	Rate Boys	—	—	—	—	—	—	—	—	—	—	6,250	—	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	1	—	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spina Bifida	69	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	1,370	—	—	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	1	—	—	—	1	—	—	—	—	—	—	—
Congenital Anomalies of Eye	72	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	5,882	—	621	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	1	—	1	—	—	—	—	—	—	—
Congenital Anomalies of Heart	74	Rate Boys	8,333	—	—	—	—	—	694	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	1	—	—	—	—	—	1	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital Anomalies of Genital Organs	80	Rate Boys	—	6,667	6,757	21,739	18,182	11,111	9,722	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	1	5	5	2	1	14	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital Clubfoot	82	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	—	—	—	730
		Rate Girls	—	—	—	—	—	—	—	—	—	1,724	—	—	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	1	—	—	—	1
		No. Girls	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Other Congenital Anomalies of Limbs System	83	Rate Boys	—	—	1,351	—	—	—	694	—	—	—	—	—	—	—
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	1	—	—	—	1	—	—	—	—	—	—	—
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Congenital Anomalies of Musculoskeletal System	84	Rate Boys	8,333	—	—	4,348	—	—	1,389	—	—	1,449	—	—	—	730
		Rate Girls	—	—	1,370	3,333	—	—	1,242	—	—	1,724	—	—	—	877
		No. Boys	1	—	—	1	—	—	2	—	—	1	—	—	—	1
		No. Girls	—	—	1	1	—	—	2	—	—	1	—	—	—	1
Congenital Anomalies of Skin, Hair and Nails	85	Rate Boys	—	—	—	—	—	—	—	—	—	1,449	—	5,263	—	1,460
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	—	—	—	—	—	—	—	1	—	1	—	2
		No. Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ill Defined Conditions—Swollen Glands	88	Rate Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Rate Girls	—	—	2,740	3,333	5,882	5,556	3,106	—	—	—	—	5,000	—	877
		No. Boys	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Girls	—	—	2	1	1	1	5	—	—	—	—	1	—	1
Ill Defined Conditions Apart from 88	89	Rate Boys	—	—	—	4,348	—	11,111	1,389	—	—	1,449	—	—	—	730
		Rate Girls	8,333	—	—	—	—	—	621	—	—	—	—	—	7,692	877
		No. Boys	—	—	—	1	—	1	2	—	—	1	—	—	—	1
		No. Girls	1	—	—	—	—	—	1	—	—	—	—	—	1	1
Injuries	90	Rate Boys	—	—	1,351	—	—	—	694	—	—	2,899	—	—	—	1,460
		Rate Girls	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		No. Boys	—	—	1	—	—	—	1	—	—	2	—	—	—	2

TABLE I.

MEDICAL EXAMINATIONS BY EACH EDUCATION AUTHORITY

1969-70

Local Authority	ENTRANTS						LEAVERS					
	No. of Examinations		No. With Defects		Percentage With Defects		No. of Examinations		No. With Defects		Percentage With Defects	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Aberdeen Burgh	**1,340**	**1,271**	**794**	**704**	**59.25**	**55.39**	—	—	—	—	—	—
Dundee	**1,418**	**1,558**	**722**	**745**	**50.92**	**47.82**	**1,377**	**1,171**	**698**	**594**	**50.69**	**50.73**
Edinburgh	**3,359**	**3,052**	**2,041**	**1,736**	**60.76**	**56.88**	**2,511**	**2,449**	**1,148**	**1,029**	**45.72**	**42.02**
Scotland excluding Glasgow	**36,952**	**34,974**	**20,812**	**17,806**	**56.32**	**50.91**	**25,473**	**25,187**	**11,709**	**11,086**	**45.97**	**44.02**
Aberdeen County	1,171	1,097	627	509	53.54	46.40	960	919	357	356	37.19	38.74
Angus	800	746	397	371	49.63	49.73	638	565	227	217	35.58	38.41
Argyll	384	397	283	277	73.70	69.77	354	339	213	175	60.17	51.62
Ayr County	2,925	2,711	1,531	1,324	52.34	48.84	2,083	2,228	928	934	44.55	41.92
Banff	326	300	201	158	61.66	52.67	358	332	147	126	41.06	37.95
Berwick	154	156	65	51	42.21	32.69	139	144	52	54	37.41	37.50
Bute	92	94	56	41	60.87	43.62	91	87	48	43	52.75	49.43
Caithness	296	294	93	104	31.42	35.37	220	204	62	81	28.18	39.71
Clackmannan	356	359	107	85	30.06	23.68	300	289	96	110	32.00	38.06
Dumfries County	683	663	478	430	69.99	64.86	629	584	351	321	55.80	54.97
Dunbarton	2,275	2,237	1,312	1,221	57.67	54.58	1,458	1,377	672	592	46.09	42.99
East Lothian	482	458	294	253	61.00	55.24	461	371	239	180	51.84	48.52
Fife	2,712	2,590	1,460	1,258	53.83	48.57	1,121	1,199	673	512	60.04	42.70
Inverness County	770	745	553	470	71.82	63.09	659	648	277	265	42.03	40.90
Kincardine	205	223	133	116	64.88	52.02	153	161	33	74	21.57	45.96
Kirkcudbright	118	101	98	75	83.05	74.26	—	—	—	—	—	—
Lanark	6,120	5,742	3,635	3,020	59.40	52.59	4,382	4,201	2,207	2,055	50.37	48.92
Midlothian	1,194	1,154	626	568	52.43	49.22	970	802	394	337	40.62	42.02
Moray and Nairn	530	534	221	186	41.70	34.83	404	391	142	130	35.15	33.25
Orkney	139	122	82	61	58.99	50.00	98	121	23	31	23.47	25.62
Peebles	107	94	51	40	47.66	42.55	84	75	25	23	29.76	30.67
Perth and Kinross	1,094	933	490	327	44.79	35.05	822	810	267	280	32.48	34.57
Renfrew	3,631	3,343	2,051	1,658	56.49	49.60	2,383	2,621	1,171	1,298	49.14	49.52
Ross and Cromarty	545	530	310	286	56.88	53.96	417	426	183	195	43.88	45.77
Roxburgh	330	271	198	143	60.00	52.77	252	262	120	122	47.62	46.56
Selkirk	160	148	49	39	30.63	26.35	183	174	71	56	38.80	32.18
Stirling County	1,791	1,653	1,151	925	64.27	55.96	1,160	1,130	521	522	44.91	46.19
Sutherland	112	121	49	57	43.75	47.11	110	95	45	38	40.91	40.00
West Lothian	1,042	1,013	496	430	47.60	42.45	477	773	236	254	49.48	32.86
Wigtown	231	199	152	131	65.80	65.83	187	210	71	77	37.97	36.67
Zetland	60	65	6	7	10.00	10.77	32	29	12	5	37.50	17.24

SCHOOL HEALTH SERVICE

TABLE V.

1969 - 70

NUMBERS, AVERAGE HEIGHTS AND WEIGHTS BY SOCIAL CLASS SCOTLAND (Excluding Glasgow)

Social Class	ENTRANTS						LEAVERS					
		Boys			Girls			Boys			Girls	
	Number	Height (Ins.)	Weight (Lbs.)	Number	Height (Ins.)	Weight (Lbs.)	Number	Height (Ins.)	Weight (Lbs.)	Number	Height (Ins.)	Weight (Lbs.)
1	178	43.84	44.13	178	43.69	43.27	71	61.83	100.85	81	61.57	102.47
2	407	43.96	43.90	369	43.60	43.21	305	61.63	101.88	281	61.78	110.06
3	1,880	43.39	43.09	1,773	43.11	42.02	1,192	60.78	98.86	1,181	60.93	104.15
4	573	43.22	43.23	539	42.98	41.98	461	60.86	99.50	467	60.55	104.44
5	374	42.86	42.45	397	42.46	40.74	318	60.12	95.22	297	60.12	102.15
Other or not stated	345	42.91	42.34	339	42.56	41.17	248	60.32	96.31	261	60.17	102.27
TOTAL	3,757	43.35	43.12	3,595	43.05	41.98	2,595	60.80	98.70	2,568	60.80	104.37

SCHOOL HEALTH SERVICE

TABLE VI.

1969 - 70

NUMBERS, AVERAGE HEIGHTS AND WEIGHTS BY NUMBER IN FAMILY SCOTLAND (Excluding Glasgow)

No. in Family	ENTRANTS						LEAVERS					
		Boys			Girls			Boys			Girls	
	Number	Height (Ins.)	Weight (Lbs.)	Number	Height (Ins.)	Weight (Lbs.)	Number	Height (Ins.)	Weight (Lbs.)	Number	Height (Ins.)	Weight (Lbs.)
1	2,776	43.75	43.96	2,667	43.44	43.04	1,802	61.68	105.71	1,746	61.39	109.11
2	12,776	43.67	43.68	12,152	43.35	42.62	6,475	61.56	102.79	6,162	61.38	107.53
3	10,328	43.44	43.28	9,727	43.03	41.96	6,333	61.13	99.98	6,135	61.11	105.48
4	5,653	43.12	42.68	5,367	42.81	41.44	4,511	60.70	98.14	4,444	60.84	104.23
5	2,645	42.76	42.13	2,520	42.46	40.74	2,687	60.25	95.75	2,755	60.45	102.03
6	1,381	42.80	42.00	1,261	42.31	40.58	1,602	60.27	95.34	1,696	60.23	101.01
7	667	42.49	41.70	648	42.27	40.60	934	59.89	94.45	1,018	60.11	101.10
8	339	42.73	42.05	324	42.15	40.38	513	59.64	94.15	587	59.94	101.31
9	190	42.38	41.28	142	41.69	39.85	290	59.52	92.59	310	59.82	98.16
10	103	42.04	41.14	86	42.10	40.31	157	59.38	91.76	172	59.72	97.80
11	51	42.16	41.12	41	41.93	39.44	80	58.79	88.20	84	59.68	98.44
12	24	43.04	41.75	21	42.38	42.00	43	59.70	93.19	49	60.08	100.45
13	10	42.70	41.30	8	42.13	40.00	29	58.83	90.59	19	59.32	99.11
14	3	42.00	40.67	8	42.13	39.88	10	59.50	89.90	7	59.29	91.43
15	4	42.75	45.50	2	41.50	39.50	3	58.00	100.33	2	58.50	90.50
16	2	41.00	35.00	—	—	—	4	57.50	89.50	1	63.00	114.00
17	—	—	—	—	—	—	—	—	—	1	62.00	93.00

TABLE VII.

1969 - 70

HANDICAPPED REGISTER BY AGE, SEX AND MAIN DISABILITY ALL SOCIAL CLASSES

DISABILITY		AGE GROUPS Under 1	1 to Under 2	2 to Under 3	3 to Under 4	4 to Under 5	5 to Under 10	10 to Under 15	15 and Over	Total
1 Deaf	M	0	0	1	0	1	8	1	2	13
	F	0	0	0	1	2	6	3	1	13
2 Partially Deaf	M	0	0	0	0	0	4	10	2	16
	F	0	0	0	2	1	1	9	0	13
3 Blind	M	0	0	0	1	1	0	0	1	3
	F	0	0	0	1	0	0	0	0	1
4 Part Sighted	M	0	0	0	1	2	7	8	9	27
	F	0	0	1	0	0	5	3	1	10
5 Other Sensory	M	0	0	2	0	0	0	1	0	3
	F	0	1	0	0	0	1	0	0	2
11 Mental Defect — Educable	M	0	0	0	0	0	48	141	51	240
	F	0	2	0	1	0	32	90	36	161
12 Mental Defect — Trainable	M	3	2	2	3	3	25	32	9	79
	F	2	6	2	3	4	21	21	3	62
13 Mental Defect — Not Trainable	M	1	1	0	0	0	10	8	0	20
	F	0	0	0	0	0	3	5	1	9
14 Mental Defect — Undetermined	M	0	1	2	1	0	7	0	0	11
	F	1	1	0	5	1	1	0	0	9
15 Psychosis	M	0	0	0	0	0	1	0	0	1
	F	0	0	0	0	0	0	1	0	1
16 Maladjustment	M	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	F	0	0	0	0	0	0	10	10	20
17 Brain Damage — Cerebral Palsy	M	0	1	5	3	5	15	4	1	34
	F	0	4	2	1	2	12	7	4	32
18 Other Brain Damage	M	0	1	0	0	0	1	3	0	5
	F	0	0	0	0	0	0	2	1	3
19 Epilepsy	M	0	0	1	2	2	18	19	3	45
	F	0	0	0	0	0	15	16	10	41
20 Spina Bifida/Hydrocephalus	M	5	3	2	1	1	15	4	0	31
	F	2	4	2	0	4	6	1	1	20
21 Speech Defect	M	0	0	0	0	0	7	8	0	15
	F	0	0	0	0	0	1	1	0	2
22 Other Neuro/Psy. Defect	M	2	0	1	0	1	3	1	0	8
	F	1	0	1	2	0	4	1	0	9
31 Absence of Upper Limb(s)	M	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	1	2	0	0	3
32 Absence of Lower Limb(s)	M	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0
33 Deformity of Upper Limb(s)	M	0	0	0	2	1	2	0	0	5
	F	1	0	0	0	1	1	1	0	4
34 Deformity of Lower Limb(s)	M	1	5	1	0	1	8	0	0	16
	F	2	4	0	2	0	3	1	0	12
35 Spinal Defect (not Spina Bifida)	M	0	1	0	2	1	3	0	0	7
	F	2	0	1	1	1	2	3	2	12
36 Paralysis	M	0	0	1	0	0	4	2	0	7
	F	0	1	0	1	0	2	2	0	6
37 Orthopaedic	M	2	2	5	3	7	16	4	2	41
	F	5	8	16	10	9	31	4	0	83
41 Heart Disease	M	2	0	3	3	6	19	21	6	60
	F	1	5	3	2	4	18	7	6	46
42 Diabetes	M	0	1	1	0	0	3	7	0	12
	F	0	0	0	1	0	0	6	2	9
43 Other Metabol	M	2	2	2	6	3	11	2	1	29
	F	0	1	4	2	4	9	1	2	23
44 Cleft Palate	M	3	3	1	6	2	4	3	2	24
	F	1	2	0	0	1	6	0	1	11
45 Asthma	M	0	0	1	3	2	13	10	5	34
	F	0	0	0	2	0	8	7	1	18
46 Skin Conditions	M	0	0	0	0	2	0	0	0	2
	F	0	0	0	0	0	1	0	0	1
47 Allergic Diseases	M	0	0	0	0	0	1	0	0	1
	F	0	0	0	0	0	0	0	0	0
48 Other	M	1	1	4	1	4	21	14	1	47
	F	2	1	4	2	2	10	6	1	28
TOTAL	M	22	24	35	38	45	281	326	104	875
	F	20	40	36	39	37	201	208	84	665
										1540

TABLE VII.

1969 - 70

HANDICAPPED REGISTER
BY AGE, SEX AND MAIN DISABILITY
ALL SOCIAL CLASSES

DISABILITY			AGE GROUPS								
			Under 1	1 to Under 2	2 to Under 3	3 to Under 4	4 to Under 5	5 to Under 10	10 to Under 15	15 and Over	Total
1	Deaf	M	0	0	1	0	1	8	1	2	13
		F	0	0	0	1	2	6	3	1	13
2	Partially Deaf	M	0	0	0	0	0	4	10	2	16
		F	0	0	0	2	1	1	9	0	13
3	Blind	M	0	0	0	1	1	0	0	1	3
		F	0	0	0	1	0	0	0	0	1
4	Part Sighted	M	0	0	0	1	2	7	8	9	27
		F	0	0	1	0	0	5	3	1	10
5	Other Sensory	M	0	0	2	0	0	0	1	0	3
		F	0	1	0	0	0	1	0	0	2
11	Mental Defect — Educable	M	0	0	0	0	0	48	141	51	240
		F	0	2	0	1	0	32	90	36	161
12	Mental Defect — Trainable	M	3	2	2	3	3	25	32	9	79
		F	2	6	2	3	4	21	21	3	62
13	Mental Defect — Not Trainable	M	1	1	0	0	0	10	8	0	20
		F	0	0	0	0	0	3	5	1	9
14	Mental Defect — Undetermined	M	0	1	2	1	0	7	0	0	11
		F	1	1	0	5	1	1	0	0	9
15	Psychosis	M	0	0	0	0	0	1	0	0	1
		F	0	0	0	0	0	0	1	0	1

Dental Services

Report by Mr N. A. WALKER

It is with pleasure that I submit the report on the work of the Dental Section for the year ending 31st July, 1970.

Staff. In addition to the Chief Dental Officer there are 9 Dental Surgeons, 10 Dental Surgery Assistants (one of whom is employed extensively on Dental Health Education) and 1 Clerkess.

Surgeons' time lost during the year due to 2 cases of protracted illness and a short time of vacant appointments was 22 weeks, giving a total effective operating strength of approximately 9½ for the year.

Premises. Ardler Clinic which was opened during the year, is now fully operational and meeting a pressing need in the area. The situation North of the Kingsway will be considerably improved by the opening of Kirkton Clinic before the end of this year, and by the later provision of a clinic in the rapidly expanding area of Whitfield.

It may be recalled that in 1954 a mobile dental caravan was acquired and its use in an urban area pioneered by the department. This has provided many years of successful service in the North of the city where building of housing and schools was, at that time, far in advance of the provision of clinics. Now, however, there remain very few schools outwith reasonable access to an established clinic, and treatment is provided in these schools meantime by the installation in the medical rooms of portable equipment. Consequently, the caravan, which was by now in need of major repairs and could no longer justify its costs for maintenance and movement, and for which no offer was received as a dental unit, was stripped of instruments and the essentially dental equipment and sold by tender.

Dental Health Education. This work goes on daily at the chairside in every surgery. In addition, lectures are given to student nurses, talks illustrated by films are given to Mothercraft classes, and particular attention is paid to the 5 year old school entrants who also receive a dental pack containing a tooth-brush, toothpaste and a beaker bearing the "Happy Smile" slogan.

This year, at the request of the Scottish Council for Health Education, and in collaboration with the Department of Dental Health of Dundee Dental School and the Department of Psychology of Dundee University, a survey of a large sample of school entrants was undertaken in an effort to determine whether the issue of the dental pack with the accompanying dental health propaganda produced any improvement in dental attitudes and dental habits.

The survey which consists of interviews, before and again some time after the issue of the packs, with a large sample of 5 year olds and some 300 of their parents, along with a clinical assessment of a sub-sample of the children, should be completed before the end of the current calendar year.

Routine Inspection. The numbers inspected during the year were, Pre-School 1,472; School children 34,097; and Expectant and Nursing Mothers 2,983.

Attendances for Treatment. Pre-School 833; School children 17,406; Expectant and Nursing Mothers 1,265.

With the increasing emphasis on the need for preventive dentistry, we are extending the use of fluoride mouth rinsing and topical application of fluorides in an effort to combat the growing un-met dental need, but it should be borne in mind that these methods of caries control are only fractionally as effective as fluoridation of drinking water supplies, and can be applied only to those children for whom treatment is accepted.

Thanks. We are much indebted to the Eastern Regional Hospital Board for the assistance and co-operation received from Dr. Shearer and his staff of the Anaesthetic Department of Dundee Royal Infirmary and from Mr D. Munro, Orthodontic Consultant. Our thanks are tendered also to the staffs of the Ante-Natal Clinics at Dundee Royal Infirmary and Maryfield Hospital, and to the Head Teachers and Teachers whose interest in the maintenance of dental health can be of great assistance.

The Chief Dental Officer attended the Annual Conference of the British Dental Association in Manchester from 13th to 17th July 1970. This affords an opportunity to keep abreast of current thought and to assess new techniques and new materials.

Local Authority Dental Service
(School and Maternity and Child Welfare)
Year 1969 - 70

1. General Statistics

	Aged 0-4 years	Aged 5-17 years or over	Ante-Natal	Post-Natal
Routine Dental Inspection ...	1,472	34,097	2,889	94
With Dental Defects ...	664	17,245	1,384	94
Offered Treatment	597	13,558	593	94
Accepting Treatment ...	462	6,501	492	94
Treated by L.A. Dental Officers	442	6,073	310	94
No. Made Dentally Fit ...	401	4,766	269	83
Special and Emergency Cases	176	1,134	—	—
Attendances for Treatment ...	833	17,406	850	415

2. Number who were Inspected by the Dental Officers

Age	Systematic Inspection	Emergency Cases	Total
3 or under	675	57	732
4	797	119	916
	1,472	176	1,648

Age	Systematic Inspection	Emergency Cases	Total
5	3,371	148	3,519
6	3,422	143	3,565
7	3,298	123	3,421
8	3,197	122	3,319
9	3,386	143	3,529
10	3,198	137	3,335
11	3,146	117	3,263
12	2,749	79	2,828
13	2,780	53	2,833
14	2,451	35	2,486
15	1,657	27	1,684
16	762	6	768
17 or over	680	1	681
	34,097	1,134	35,231
Ante-Natal	2,889	—	2,889
Post-Natal	94	—	94
	2,983		2,983

3. Details of Treatment

	School	M. & C.W.
(a) Fillings:—		
(i) Permanent Teeth Filled	9,294	520
Permanent Surfaces Filled	8,469	554
(ii) Deciduous Teeth Filled	4,552	423
Deciduous Surfaces Filled	4,947	428
(b) Extractions (not including orthodontic)—		
(i) Permanent Teeth	1,325	628
(ii) Deciduous Teeth	3,722	380
Administration of general anaesthetic	1,963	298
Other Operations—		
Permanent Teeth	4,242	750
Deciduous Teeth	2,232	470
Dentures—		
Partial	51	40
Full	5	81
Repairs to Dentures	11	11
Radiographs—No. of Exposures (not including orthodontic)	147	22

4. **Orthodontic Treatment**

No. of Cases continued from previous year ...	125
New Cases	144
Cases Completed	107
Cases Discontinued	61
Cases Continuing at end of year	101
Attendances for Treatment	1,208
No. of Consultations with R.H.B. Orthodontist ...	76
No. of Diagnostic examinations (not followed by treatment)	35
No. of Cases Treated	
(a) With Removable Appliances	83
(b) With Fixed Appliances	—
No. of Extractions (non-caricus)	
(a) Permanent Teeth	112
(b) Deciduous Teeth	95
Repairs to Orthodontic Appliances	10
Radiographs—No. of Exposures	55

Sanitary Department,
93 Commercial Street,
DUNDEE, DD1 2AQ.

**To The Honourable,
The Secretary of State for Scotland; and
The Lord Provost, Magistrates and Councillors—
the Local Authority of the City of Dundee.**

Madam and Gentlemen,

One of the many statutory duties which a Sanitary Inspector must comply with is the preparation and submission of an Annual Report covering the work of his department during the period under review, and I now honour this obligation by herewith submitting to you my report on the work of the Dundee Sanitary Department for the 12-month period ending 31st December, 1970.

Incorporated within the report, in more or less the usual manner, is certain additional statistical and other information concerning the City, its population, and so on, which past experience has shown to be of much general interest, and usefulness on occasion for reference purposes. So far as the interests of this department are concerned, the report also contains all specified information requested by the Central Authority in Local Health Authority Services Circular No. 2/1971.

As one would naturally expect, of course, the compilation of such a comprehensive and all-embracing document would not be possible without the invaluable assistance and co-operation where necessary of other Chief Officials of the Corporation and their staffs to whom acknowledgment and thanks are gratefully offered.

Acknowledgment is also made of the support and encouragement which continue to be extended to me at all times by my Convener and all other elected members of the Local Authority.

Most sincere thanks are also due to the staff of the department for their usual conscientious application to work on behalf of the interests and responsibilities of the Corporation; not least, of course, in the interests of public health.

I sincerely hope that those who peruse the report will find it interesting and informative.

I am, Madam and Gentlemen,

Your obedient servant,

JOHN FOREMAN,

Chief Sanitary Inspector.

FOREWORD

In the part of this report devoted to the interests and responsibilities of the department's Food Section comment is made on the difficulties of obtaining and maintaining necessary and acceptable standards—particularly in the field of Food Hygiene—because of weak and outdated legislation.

Here, I should like to take up one point under this heading and renew in the strongest possible terms a plea that I and many of my colleagues have made in the past for the Secretary of State, no matter how belated it may be, to use his powers under Section 14 of the Food and Drugs (Scotland) Act, 1956, and require, by Order, the compulsory registration by the local authority of designated food premises, particularly "high-risk" businesses such as catering establishments (including industrial canteens), bakehouses, cooked meat and fish manufacturers and retailers, fried fish restaurants, butchers, game and poultry dealers, fishmongers, etc.

I do not propose to cover old ground by repeating the many instances which have been quoted in the past where compulsory registration could be used to overcome weaknesses in the general legislation and provide added protection to consumers against the well known risks to health which arise from low standards of hygiene. Suffice to say that these arguments are still applicable; and are being added to almost daily.

On this last point, I should like to highlight an extremely serious problem which recently became acute in the catering industry and which cannot be satisfactorily dealt with by way of existing legislation, namely, traders moving into inadequate premises and expanding their businesses to such an extent that even with the best will in the world, room for the additional equipment and the food storage and preparation areas necessary is simply not available.

This applies particularly to the old-type fish and chip business which, in the old days, was carried on mainly in front and back shop premises by the Italian community who confined their trading to off-sales only with, on occasion, a few tables and chairs inside for consumption of food on the premises.

Many of these businesses are now being taken over by members of the Chinese restaurant Community who generally start off by dealing only in fish and chips in the approved manner. Soon, however, they expand their interests by cooking on the premises and offering for sale to their customers all kinds of exotic and most acceptable Chinese dishes—in some cases, for off-trade only; in others, for consumption on the premises, as meals, by the provision of the odd table and chairs. Without a doubt, the premises will have been properly equipped to meet the requirements of the Food Hygiene Regulations for a fish and chip shop but, of course, lots more equipment, storage facilities, etc. are necessary to cope with all the extra activities; and space for this is simply not there.

Another excellent example of roughly the same type of problem concerns small front and back shop premises in the City which were formerly used as a shoe shop. A water closet and a sink were provided inside. When the premises became vacant, the new tenant sought the advice of the department on what would be needed legislatively to enable him to start, in a small way, selling sandwiches and minerals for consumption on the premises during limited daytime trading hours. The advice was that since he intended to provide seating for about twenty customers, an additional water closet apartment would be preferable (to meet the requirements of local legislation) and that a minimum of a twin sink unit with hot water laid on would be essential for the washing of utensils and the one or two pieces of equipment; also necessary would be the provision of a wash basin with hot water supply for the use of the food handlers. It was fully understood that there was to be no cooking of food on the premises. Advice was also given that the Planning Department should be consulted about the need for planing consent for change of use, but the answer to this was in the negative. Rather surprisingly, the premises were thereupon opened up for business with complete disregard to the advice sought for and given concerning requirements. Even after the service of a Notice, only the twin sink unit was eventually provided, and by this time the business had been extended to cover the service of lunches, the food for same being prepared and cooked in the small back shop. Before long, however, the business was closed down and the premises vacated.

The new proprietor of the premises completely refurbished the front shop with expensive fitments before opening as a Chinese restaurant with late closing hours and serving a wide range of meals. Before opening, however, it was pointed out to him that in order to meet the requirements of the Food Hygiene Regulations he would have to install a wash-hand basin, an additional sink for equipment cleaning and one for food washing—all in an extremely small kitchen area and virtually an impossibility. He was also informed that another water closet would be required in order that his premises could be registered by the Local Authority as a place of public refreshment. So far, it has only been possible to provide the wash-hand basin, and the department is therefore faced with the untenable situation of having in its area full-scale meals being prepared and sold in premises which are totally inadequate and unsuitable.

These are by no means isolated instances and the practice is tending to become more and more acute as people with little or no experience of the food trade attempt to cash in on the increasing trend to eat out.

As I see it, the answer is simple and entirely in the hands of the Secretary of State. Make an Order, or Orders, requiring compulsory registration, and if premises which have been duly registered by the local authority later become unsatisfactory or unsuited to the nature of the business, the registration can be withdrawn. After all, it must never be forgotten that it is the public health that is at risk if food is stored, prepared and/or sold under unsuitable conditions in unsuitable premises.

To my mind, also, registration is a far better guarantee of satisfactory premises and hygienic standards and practices than a £5, or even a £10 or £20 fine, in the Courts—even if this action was always possible. It also carries a seal of approval which, I feel, is far from being a bad thing from the point of view of the trader, and its value has been proved in connection with the milk and ice cream industries where registration and licensing have been compulsory for many years.

Staffing

Since the preparation of the last Annual Report no change has taken place in the approved establishment of the department, which therefore remains as follows:—

	Chief Sanitary Inspector
	Depute Chief Sanitary Inspector
4	Senior Inspectors
5	Assistant Senior Inspectors
8	Inspectors
4	Student Inspectors
2	Food Hygiene Officers
10	Technical Assistants—five on a temporary basis for Smoke Control Area survey work
1	Senior Clerical Assistant
4	Clerical Assistants
1	Senior Shorthand Typist
1	Shorthand Typist

At the time of writing there are vacancies for one Inspector, one Technical Assistant (temporary) and one Clerical Assistant. The two last mentioned posts are in process of being filled but considerable difficulty is being experienced in finding a suitable applicant for the Inspector vacancy because of the continued shortage of qualified men.

Death-Rate: Density of Population and Acreage

The death-rate per 1,000 for 1970, as corrected, was 11.8, compared with 12.3 for 1969 and 12.2 for 1968.

The population, as estimated to the middle of 1970 by the Registrar-General, was 181,508.

The acreage of the City, excluding foreshore, is 12,294, which works out at 14.76 persons per acre.

Burial Grounds and Cremation

The following are the numbers of interments which took place during 1970 at the various cemeteries within the city:—

Eastern Necropolis	487
Western Necropolis	397
Western Cemetery (Perth Road)	35
Barnhill Cemetery	85

At the Crematorium 1,976 cremations were carried out during the same period.

Rainfall

The total rainfall for 1970, as recorded at the official measuring station at Mayfield Hall, was 30.38 inches, as against 29.21 in 1969, 28.09 in 1968 and 23.29 in 1967.

The monthly figures are shown in the following table:—

January	4.40	inches
February	1.64	,,
March	0.70	inch
April	1.32	inches
May	1.64	,,
June	3.05	,,
July	2.84	,,
August	4.02	,,
September	4.22	,,
October	1.68	,,
November	3.76	,,
December	1.11	,,
	30.38	,,

This shows an average fall over the City of 2.53 inches per month, compared with 2.43 for 1969, 2.34 for 1968 and 1.94 for 1967.

Sources of Water Supply — Other than Mains Supply

Three wells and springs within the City continued to be used during 1970, details being as follows:—

Domestic purposes	1
Manufacture of aerated water	1
Riding School—Watering horses	1

Complaints Relating to Insanitary Conditions and Public Health Nuisances

The number of such complaints received during the year totalled 3,633 and required 13,508 visits by the staff, as a result of which 3,851 intimations, verbal or written, were given to property owners, factors, authors of nuisances or other persons responsible, requiring the removal of 4,041 causes for complaint.

The following table gives statistical details of the complaints and/or nuisances encountered and dealt with:—

Choked and defective water closet basins, sinks, drains, etc.	1,057
Choked and defective rones and rainwater conductors	119
Leaking roofs	156
Defective chimneys	19
Internal disrepair of houses	795
Dilapidated refuse bins	25
Dirty bin stances	148
Dirty and verminous houses	273
Infestations of rats and mice	488
Dirty common stairs, passages and waterclosets	158
Miscellaneous	803
	4,041

The co-operation of owners, house factors and others responsible for taking remedial action was received in the majority of cases without having to resort to the service of Notices in terms of the relevant legislation. When circumstances made this a requirement and such Notices were served, the remedial works were all carried out within the time specified. In no instance, therefore, was it found necessary to institute Court proceedings.

Regular use was, as usual, made of the arrangement with the Public Works Department for the emergency clearing of choked drains during week-end periods where public streets and footpaths were being fouled, the cost of this service being recovered later from the owners of the subjects involved. New powers contained in local legislation to deal with choked drainage were also used and found to be very helpful in speeding up repairs, especially at tenement properties where a number of owners shared a mutual responsibility.

There is a continuing cause for concern in the increasing number of cases where door and window barricades are being forcibly removed from the many condemned and derelict properties throughout the City. Vandalism thereafter extends well beyond this, and the houses also become depositories for all sorts of waste and refuse. Apart from the many obvious objections to this sort of thing, children are attracted to such places and are frequently found playing in the most dangerous and undesirable conditions imaginable. The answer, of course, is the immediate demolition of all such eyesores, but legal difficulties concerning responsibility are the cause for delay in nearly every case.

A continuing annual increase has to be reported in the number of dampness complaints requiring attention which, when investigated, are found to be due to condensation. Most frequently, the cause of the trouble is that fireplace openings have been sealed off when electric fires have been installed and it is often extremely difficult to convince complainants that the remedy is the provision of more ventilation for the room or rooms. In cases where a considerable amount of cooking and clothes drying is carried out, the installation of an extraction fan in the room where this work goes on is advised so that the moisture saturated air does not enter the other rooms.

The fouling of public footpaths, parks and children's play areas by dogs is a continuing problem and a source of annoyance to housewives having to remove the filthy excrement from shoes and carpets. Why the community at large must continue to be exposed to the inconvenience and health hazard caused by a possible minority of dog owners is the unanswerable question raised by the often irate complainer.

Air Raid Shelters

Towards the end of the year, the Secretary of State agreed to a temporary relaxation in the arrangements governing the demolition of air-raid shelters, thereby enabling the Local Authority to secure the demolition of a further 116 such structures in various parts of the City. The shelters now remaining are all situated in areas zoned for redevelopment and these can be demolished as required at no expense to the Corporation.

Verminous and Dirty Houses and Persons

Bugs. Only two dwellings were found to require attention for bed bugs during 1970. In one case the house was occupied by an elderly couple and found to be so filthy and heavily infested that it was necessary to arrange for their temporary removal to accommodation at the Cleansing Station until the necessary eradication measures could be carried out in the dwelling. All bedding, upholstered furniture, skirting boards and door mouldings had to be removed and destroyed, and regular visits are now being made to ensure that the conditions do not recur.

Other Insect Pests. Effective treatment was carried out at 401 premises to eradicate other anti-social insects including fleas, lice, silverfish, earwigs, cockroaches, ants and various species of beetle.

The number of complaints received concerning garden pests, particularly earwigs, ants and clover mites, tends to increase each year pro rata with the number of families being rehoused from tenement properties to suburban estates.

The use of modern insecticides, however, continues to prove extremely effective in the eradication of all such pests and parasites.

Dirty Houses. A total of 32 such dwellings came under the scrutiny of the department during the year under review but in every case advice and guidance to occupiers produced the desired results so that at no time was it necessary to institute legal proceedings.

Verminous Persons. The attention of the department was necessary in regard to seven persons infested with body lice. Concerning such matters, close co-operation with other Corporation departments sharing public health and environmental hygiene responsibilities is always kept in mind so that each case can be given the fullest consideration and any necessary social after-care.

Whitewashing and Painting of Common Stairs and Passages

The continuing reduction in the number of tenement properties in the City has produced the obvious result, that fewer and fewer complaints about conditions are now reaching the department compared with previous years.

Where necessary, of course, routine attention continues to be given to this matter, but most of our problems are concerned with properties where mutual ownership and responsibility are involved.

Back Courts, Areas, Footways, etc.

The powers and obligations of the Corporation under the Civic Amenities Act, 1967, continue to result in an improvement in dealing with the removal of litter and discarded furniture, etc. from such places as back courts, areas and so on. Relative thereto, of course, close co-operation is maintained with the Cleansing Department so that the best results may be obtained.

Prevention of Damage by Pests Act, 1949

Part 1 of this Act, which relates to rats and mice, is administered by the department and while it was not found necessary to undertake any special survey during the year, evidence of rodents was always looked for during the inspection of premises for other purposes.

There is no rodent exterminator on the establishment of the department but private operators are available in the City as required and the system works very satisfactorily indeed.

While infestations of mice which had to be dealt with were generally of a minor nature, it is now being found that almost 50% of these rodents are resistant to the previously efficient warfarin poison. The use of a narcotic bait, however, is proving successful as a suitable alternative.

There is no indication so far, in this area at least, of rats showing a similar resistance to the effects of warfarin which is therefore still being used with considerable success.

The provisions of the Threshing and Dismantling of Stacks (Scotland) Regulations, 1950, were, as usual, brought to the notice of farmers at the appropriate time to ensure that the necessary measures were taken to prevent the escape of rats when threshing, etc. operations were being carried out.

Complaints received during 1970 concerning rodent infestation totalled 371; 205 relating to rats and 166 to mice.

In the course of securing the eradication of these pests 726 visits were made by the inspectorate.

The City Engineer kindly furnishes the following information relative to the action taken by his department towards the extermination of rats in the sewers.

"**Rat Destruction:** During the year 16th May, 1969—15th May, 1970, rat repression measures continued in the City's sewerage system, especially in the older parts of the town, with satisfactory results. The sum of £3,207 was spent on this service."

Tents and Vans

A total of 41 visits were paid to caravans used for human habitation on approved sites within the City. The commonest causes of nuisance encountered were neglect to maintain the communal sanitary facilities in working order, irregular removal of refuse, and unsatisfactory site maintenance. All difficulties encountered, however, were soon remedied.

Stables

Routine visits were made during the year, but particularly during the summer months, to ensure that satisfactory conditions were being maintained at the few remaining stables in the City. The regular removal of manure and treatment to prevent fly breeding is insisted upon. The structures are inspected to ensure that adequate protection is afforded the animals during severe weather conditions.

Public Sewerage

As City Engineer, Mr Alexander Mollison, B.Sc., A.M.I.C.E., A.M.I.Mun.E., is responsible for the construction and maintenance of the sewers within the City, and he kindly furnishes the following information relative thereto:—

"During the year 16th May, 1969, to 15th May, 1970, 3.2 miles of new sewers were laid, making the total length of sewers in the City 303.6 miles.

The new mileage included drainage works on Corporation Housing Schemes at Craigie 3rd Development, Kirk Street 2nd Development, Trottick 3rd and 4th Developments and Whitfield 5th and 6th Developments.

Sewers were laid for private housing estates at Barnhill 2nd Development, Campfield 3rd Development, Lennox Gardens, Sidlaw Park and at Gorrie Terrace.

A 15″ diameter sewer was also laid at Gourdie Industrial Estate to accommodate future development.

Since 15th May, 1970, additional sewers have been laid at Barnhill 2nd Development, Dunavon Estate, Hazel Drive, Whitfield Crudens/Skarne Phase 2 and Gotterstone Phase 2.

A sewer diversion was also laid at Balfour Street for the University of Dundee.

During the year 1969-70, the sum of £29,183 was spent on maintenance and repair.

Flooding: No appreciable flooding occurred during the period 1969-70, however, during the summer of 1970, there were 3 extremely heavy rainstorms, resulting in flooding. This flooding was mainly confined to the Central Area, although, after a storm on the 8th September, 1970, other parts of the City were also affected."

Cleansing Service

Mr William A. Lewis, M.I.P.C., the Superintendent of Cleansing, is the official responsible, in Dundee, for the work of refuse collection and disposal, street cleansing and control of public conveniences (excluding those in public parks) and he has kindly furnished the undernoted data relative to the work of his department:—

"The **Refuse Collection** Service from houses, shops, offices and factories was maintained throughout the year with the same frequency as in the past. Household bins are emptied once a week where there is one bin for each house and two or three times a week in tenements where there are communal bins. The collection of trade refuse from shops, etc. varies from daily to once weekly depending on the nature and quantity of waste produced. Some 14,000 bins are emptied daily and, with the exception of the week following public holidays, the collection is made on the same day and at the same time in each week.

The volume of refuse continues to increase at an estimated rate of 7% each year; there is more "extra" refuse in the form of boxes put out beside the dustbin, and a greater volume of refuse from shops. An indication of this increase is that the large refuse containers which are used in multi-storey flats are today installed in the ratio of one to every six houses. Ten years ago one container was sufficient for the needs of ten households.

Over one thousand large refuse containers are now installed at multi-storey buildings and new blocks of flats throughout the city.

The collection and transport of the growing volume of refuse requires that the Department is equipped with modern compression vehicles. Each year, new machines purchased as replacements for older vehicles, are selected from the latest types available, and today, more than half the fleet is comprised of vehicles capable of compacting refuse to one-third of its original volume, thus obtaining greater pay-loads and more economical collection.

Refuse Disposal is mainly by controlled tipping. The coup at Leoch, which had been in use since 1968, was completely infilled by November, 1970. A new tip site had been obtained at Westhall Quarry, by Duntrune, but to avoid polluting the Murroes Burn which passes within 400 ft. of the quarry, it was necessary first, to pump out the 60ft of water in the quarry. Since the coup is some distance from the city, it is difficult and costly to obtain any supply of sub-soil from building operations which could be used as covering material. Instead, the pulverised refuse from the disposal plant at Marchbanks is used and has proved invaluable for this purpose.

As a refuse coup the quarry has the further disadvantage of having houses situated within a few hundred yards and there were objections from the residents initially but the difficulties here have been largely overcome.

It is clear, however, that disposal of the City's refuse by tipping will become very much more expensive in future. New tip sites are difficult to obtain and any which may be found will be at progressively greater distances from the City, causing a corresponding rise in disposal costs. The alternative is to treat the refuse, either by pulverisation or incineration, in order to reduce the volume remaining for final disposal and to eliminate the need to dump crude refuse from the City in the surrounding countryside. In this connection, the refuse pulverising plant at Marchbanks is now handling half of the daily refuse intake and the programme is that a new incineration plant will be built at Foundry Lane to dispose of the remainder.

The financial return from materials salvaged has been much less than anticipated. The only outlet in Scotland for waste paper in quantity is the Mill at Aberdeen and for the most of the year the Mill was overstocked, resulting in a restriction in the intake from local authorities. Ferrous metals, mostly food cans, are recovered by magnetic separator, baled and sold, but the market for this material is also limited, the only outlet being in the Midlands.

Street Cleansing of the principal thoroughfares is carried out mechanically by suction/sweeping vehicles supplemented by manual sweeping of pavements. In the older housing schemes where cars are 'garaged' permanently in the streets, machine sweeping is impracticable and these still require to be kept clean by 'brush and barrow' street sweepers. In the new housing areas, this difficulty is relieved by the provision of car parks and lock-up garages, but a new situation has arisen in that the extensive landscaped areas surrounding the flats (now over

1,000 acres) are a natural playgroud for the children in the area and this means litter. Again the problem is much worse during the school holidays; labour costs are high throughout the summer because this litter can only be removed by hand, and it has to be done at intervals of only two or three days.

Snow Clearance and Street Gritting operations were confined to the period between 14th November, 1970 and 2nd March, 1971. The winter was exeptionally mild; there were only two snowfalls and on each occasion the depth of snow was less than 2 inches, but on 26 days, the Department's gritting vehicles were in use to deal with ice on the roads. The Department is now responsible for all gritting operations in the City, a duty formerly shared with the City Engineer's Department.

Public Conveniences serving the shopping development in Overgate were opened in November and another toilet is nearing completion at Kirkton Community Centre. Plans are being prepared for eight new toilets throughout the City and for improvements to existing conveniences in the City centre. Work on several of these projects will be commenced during the coming year.

Tonnage of Refuse Collected:—

House Refuse	56,157 Tons	(55,903 in 1969/70)
Trade Refuse	11,678 Tons	(11,415 in 1969/70)

Income from collection and disposal of trade refuse:—

£24,147 (£21,590 in 1969/70)

Cost of Refuse Collection	£288,740
Cost of Refuse Disposal	66,044
Cost of Street Cleansing	160,820
Public Conveniences	49,584.

Housing

Visits under this heading during the year under review numbered 11,601 but action taken by the department over the same period towards reducing the number of the City's insanitary dwellings resulted in only 25 such houses being made the subject of individual Closing and Demolition Orders. The explanation for this is given below. Demolition Orders were applied in respect of 11 of the dwellings and Closing Orders in the case of the 14 others. Details are as follows:—

	HOUSES				
	1 room	2 rooms	3 rooms	4 rooms and over	Total
Dwelling-houses Closed by Demolition Order	3	7	1	—	11
Dwelling-houses Closed by Closing Order ...	4	10	—	—	14
	7	17	1	—	25

The coming into operation of the Housing (Scotland) Act, 1969, which introduced a "tolerable standard" in place of the "unfitness for human habitation" provisions contained in the 1966 Act was the main reason for the above figures being so low. Under the new Act greater emphasis in dealing with unsatisfactory housing is placed on "area" improvement and the Local Authority's future policy was therefore largely changed to promote Housing Treatment Areas wherever possible, and to limit the use of Closing Order and Demolition Order procedure accordingly.

Of the 25 unsatisfactory dwelling-houses already mentioned as having been dealt with during 1970, only 4 were found to be still in occupation at the end of the year, and a survey of all dwellings so dealt with under Part II of the 1966 Act, that is to say, including those for previous years, plus those in respect of which "Undertakings" had been accepted, revealed that 169 were still in occupation, namely:—

	HOUSES				
	1 room	2 rooms	3 rooms	4 rooms and over	Total
Houses dealt with under Part II	14	122	26	5	167
Houses Closed Voluntarily after acceptance of Undertaking by Local Authority	1	—	1	—	2
	15	122	27	5	169

These 169 unfit houses were found to be occupied by 169 families, and in keeping with the statutory standard for overcrowding laid down in the Housing (Scotland) Act, 1966:—

112 householders were found to require alternative accommodation of 1 room,
41 householders were found to require alternative accommodation of 2 rooms, and
16 householders were found to require alternative accommodation of 3 rooms.

The Corporation's re-housing policy, however, is based upon the standard—according to the number of bedrooms—laid down and recommended in D.H.S. Circular No. 149/44, and in this case the following were the numbers and sizes of houses needed to accommodate the families concerned:—

112 of 2 rooms (1 bedroom and living room)
45 of 3 rooms (2 bedrooms and living room)
9 of 4 rooms (3 bedrooms and living room)
3 of 5 rooms (4 bedrooms and living room)

As already indicated, the Corporation's policy of promoting Housing Treatment Areas was continued during 1970, but the results, to date, have been extremely disappointing. At the end of the year confirmation of the Compulsory Purchase Order in respect of the Ogilvies Road, etc. Area was still awaited, an objection having been lodged by the owners of a property adjoining, the acquisition of which was considered necessary in order to secure the satisfactory development of the Area. Moreover, the Compulsory Purchase Order in respect of the Catherine Street, etc. Area had still not been made by the end of the year. The Corporation has also decided to apply Housing Treatment Area procedure to deal with the large residential area embracing Kinnaird Street, Kinghorne Road, Kinloch Street, Carmichael Street, Stirling Street and Rosebank Street. For convenience, this area has been divided into four sections, and at the time of writing the Local Authority have already passed Resolutions in respect of No. 1 and No. 2 Sections; but the Compulsory Purchase Orders relative to these have still to be made. As in the case of the two Housing Treatment Areas first mentioned, the Resolutions provide that the Areas are to be dealt with in the manner laid down in Sub-section (2) (a) of Section 4 of the Act, that is to say, by securing the demolition of all the buildings contained therein.

The Local Authority, at the same time, also made Orders under Section 16 of the Act prohibiting the occupation of the houses except with their consent—which, in effect, means that when the sitting tenant vacates a house it cannot be relet without the consent of the Corporation.

The following table gives statistical details relative to the Housing Treatment Areas in the City in respect of which Resolutions have so far been made:—

		NO. OF HOUSES ALREADY CONDEMNED AS UNFIT FOR HUMAN HABITATION	
	Total No. of Houses	Demolition Orders	Closing Orders
Ogilvies Road, etc.	*208	94	61
Catherine Street, etc.	141	38	29
Kinnaird Street, No. 1 ...	177	24	—
Kinnaird Street, No. 2 ...	171	12	—

*Includes 14 houses the acquisition of which is necessary to secure the satisfactory development of the Area.

In the report for 1969, reference was made to 90 applications received by the Local Authority from landlords for Qualification Certificates in terms of Part IV of the 1969 Act. Such applications are in respect of "controlled tenancies" which the landlords wish to have converted into "regulated tenancies" so that "fair rents" within the meaning of the Rent Act, 1965, can be charged in lieu of the existing "controlled rents". To qualify for this, of course, the dwellings must satisfy certain conditions, viz.; (1) be provided with all the standard amenities; (2) be in good repair, having regard to age, character and locality and disregarding internal decorative repair; and (3) meet the tolerable standard.

During the year under review a further 119 such applications were submitted to the Local Authority and referred to this department for reports and recommendations. Of that number several had to be refused, one because the dwelling was not provided with all the standard amenities, and the others because the owners and/or agents had failed to comply with requests to carry out certain repairs. In several instances tenants made representations to the Corporation that, in their opinion, their dwellings did not satisfy the qualifying conditions, but, of course, the ultimate decision and recommendation had to be based on the report and findings of the inspectorate. In quite a number of cases, however, the appellant was really objecting to the possibility of having to pay a higher rent because of some improvement(s) he had made to the dwelling at his own expense.

Of the total of 209 applications for Qualification Certificates lodged with the Local Authority since the Act came into operation, 75 have so far been granted, 28 refused and 5 withdrawn, leaving a balance of 101 in abeyance.

Housing of Elderly Persons

During 1970 no houses of 1 room were completed by the Corporation for occupation by elderly persons, but in recent years the policy has been to also accommodate such people in dwellings of 2 rooms which, in the main, are allocated to the middle age group. During the year under review, 958 houses of this size were built. Of interest under this heading is the fact that the end of the year survey referred to earlier revealed that of the 169 dwellings condemned under the Housing Acts and still occupied, the tenants of 32 were Retirement Pensioners.

Overcrowding

The Corporation's Revised House Letting Regulations were brought into operation in the spring of 1970, and this brings the rules for the assessment of overcrowding into line with those which have been used by the Corporation for many years in the application of their re-housing policy; that is to say, by basing them upon the standard laid down and recommended in D.H.S. Circular No. 149/44, namely, according to the number of bedrooms and allowing two persons per bedroom. Previously, the assessment was made in accordance with the statutory standards laid down in the Housing (Scotland) Act, 1966. This new method of assessment, of course, immediately added considerably to the number of overcrowding cases on the City Factor's lists, and the re-checking of these—which is done by the staff of this department—is putting a considerable strain upon resources.

Housing Priority for Tuberculosis Cases

The situation in respect of families with a T.B. element where the Medical Officer of Health recommends priority in rehousing is shown in the following table:—

On list at 31st December, 1969		7
Added during 1970		9
		16
Removed during 1970		
Rehoused	10	
Other reasons	Nil	
		10
Remaining on list at 31st December, 1970		6

Squatting

Only one case of illegal occupation of a condemned house was discovered during 1970, and action by the department resulted in the owner having the offender evicted without resort to Court proceedings. Other reports of squatters were received and investigated, but in every case it was found that the dwelling had not in fact been dealt with under the Housing Acts. Owners were advised of all such cases, however, for any such action as they might wish to take against the trespassers. As in former years, the Corporation continued their policy of barricading condemned dwellings as soon as they were vacated by the legal occupiers. During the year under review, 226 houses were treated in this way and this has, as usual, helped considerably in keeping the squatter problem to a minimum. Another probable reason, of course, is that house agents are now having great difficulty in finding tenants for sub-standard houses, and there would therefore appear to be no valid reason why any family should find it necessary to "squat" when such dwellings are available for letting.

Housing (Repairs and Rents) (Scotland) Act, 1954 — Rent Act, 1957
Certificates of Disrepair

There were no applications from tenants for Certificates of Disrepair during the year, nor were any requests received for the revocation of such. It would seem that this aspect of housing legislation no longer serves any great purpose.

Houses in Mulitiple Occupation

Any complaint or adverse report on any such establishment, particularly as regards overcrowding and the possible need for a Direction by the Local Authority limiting the number of rooms for letting and/or the number of lodgers in each room, is thoroughly investigated. Equally important, of course, are the communal facilities available in the house as these influence considerably the numbers permitted under such a Direction.

Only one complaint relating to a house in multiple occupation was received by the department during the year, the complainer being the occupier of a tenemental flat situated directly below the establishment. Certain allegations were made which in varying degrees were justified; in particular, one of flooding. The person responsible for this careless act was a merchant seaman who had been temporarily accommodated at the request of one of the lodgers. By the time the complaint was received, however, the offender had already been evicted.

Visits made under this heading numbered 20.

Statistical Tables Relating to Housing

The tables which follow provide some specialised statistical information on housing matters which, it is hoped, may be of interest, and of use on occasion for reference purposes.

DETAILS for the YEAR 1970

TABLE I.

HOUSES PROVIDED

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
(a) **New Houses Completed and Ready for Occupation—**					
(i) By Corporation	—	958	1,331	505	2,794
(ii) By Scottish Special Housing Association	—	—	—	—	—
(iii) Erected by Private Enterprise	—	—	153	73	226
(b) **Shops, etc. Converted into Houses, Houses Reconstructed and Houses Divided**	26	42	2	72	142
Totals — Houses Gained	26	1,000	1,486	650	3,162

TABLE II.

HOUSES CLOSED and VACATED in WHOLE or in PART

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
(a) **Converted into Business Premises**	—	1	1	—	2
(b) **By Absorption into Other Houses**	9	46	—	1	56
(c) **Closed by Order, Demolition Order, etc.** ...	32	165	23	6	226
(d) **Comprehensive Development Areas** ...	33	132	49	33	247
(e) **Voluntarily Closed**	—	24	56	34	114
(f) **Prefabricated Temporary Houses**	—	—	177	—	177
Totals — Housing Losses	74	368	306	74	822

TABLE III.

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Net Gain
Net Result for 1970 is that there are 2,340 more houses available for human habitation than at 31st December, 1969	48 Less	632 More	1,180 More	576 More	2,340

DETAILS for the PERIOD 1919 to 1970

TABLE IV.

HOUSES PROVIDED

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
(a) **Houses Completed and Available for Occupation—**					
(i) By Corporation—including Trusts, etc.	591	6,511	19,779	8,047	34,928
(ii) By Scottish Special Housing Association	—	4	1,516	1,628	3,148
(iii) Government Erected Temporary Houses	—	—	1,550	—	1,550
(iv) Erected by Private Enterprise	15	101	2,967	4,625	7,708
(b) **Shops, etc. Converted into Houses, Houses Reconstructed and Houses Divided**	260	691	417	1,170	2,538
Totals — Houses Gained	866	7,307	26,229	15,470	49,872

This table shows a grand total of 49,872 houses gained—an average of 959 houses per annum.

TABLE V.

HOUSES CLOSED and VACATED in WHOLE or in PART

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
(a) **Converted into Business Premises**	174	250	141	312	877
(b) **By Absorption into Other Houses**	305	290	188	560	1,343
(c) **Closed by Order, Demolition Order, etc.** ...	4,957	8,154	1,030	257	14,398
(d) **Comprehensive Development Areas** ...	516	1,767	578	287	3,148
(e) **Voluntarily Closed**	405	729	364	255	1,753
(f) **Prefabricated Temporary Houses**	—	—	1,541	—	1,541
Totals — Housing Losses	6,357	11,190	3,842	1,671	23,060

The total 23,060 houses closed is equal to an average annual loss of 463 houses.

TABLE VI.

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Net Gain
Net Results for 52 years (1919 to 1970) is that there is an increase of 26,812 houses in the City, or an average annual contribution of 516	5,491 Less	3,883 Less	22,387 More	13,799 More	26,812

TABLE VII.

Loci and details of Housing Schemes under Control of Corporation at end of 1970 (from data supplied by the Director of Housing)

"A"

Ward	Scheme or Site	Type	Number of Houses Completed Apartments					
			1	2	3	4	5	6
1.	Taybank	Flatted	—	—	188	—	—	—
	Craigiebank	Flat. & Cot.	—	—	204	76	—	—
	Ann Street, Nos. 47/49	Tenement	—	6	6	—	—	—
	Arbroath Road, Nos. 27/31	do.	—	18	—	—	—	—
	Cotton Road, Nos. 8/10	do.	—	12	—	—	—	—
	Dens Road, Nos. 2/4	do.	—	—	12	—	—	—
	Bonnybank Road, Nos. 10/12	do.	—	—	8	—	—	—
	Forebank Road, Nos. 15/17	do.	—	—	8	—	—	—
	Maitland Street	do.	—	6	36	6	—	—
	Watson Street, Nos. 73/75	do.	—	—	20	12	—	—
	Dean Avenue	Ten. & Cot.	—	—	28	10	—	—
	Strips of Craigie	Cottages	8	28	83	12	—	—
	Craigie Drive	do.	—	79	115	37	—	—
	Craigiebank Circle	Tenements	—	48	—	—	—	—
2.	Corso Street	do.	—	66	222	24	—	—
	West Port, Nos. 4/14 and 56 South Tay Street	do.	—	6	12	—	—	—
	Hilltown, Nos. 59/69	do.	—	—	—	6	—	—
	Hilltown Terrace, Nos. 1/9	do.	—	—	—	30	—	—
	Hilltown (Nos. 1/11 McDonald Street)	do.	—	—	24	12	—	—
	Dallfield	Multi-Storey & Tenement	—	112	248	8	—	—
3.	Harefield Road, Nos. 33/43	Flatted	—	12	8	—	—	—
	Lorne Street, No. 106 and Nos. 1/3 and 2/6 Kerr Street	Tenement	—	—	36	—	—	—
	Marshall Street, No. 2 and 50 High Street	do.	—	12	—	—	—	—
	Balgay Street, No. 2 and 2/4 St. Ann Street	do.	—	—	18	—	—	—
	Beechwood	Ten. & Cot.	32	—	134	354	35	—
	Wellgrove	Flat. & Cot.	—	—	—	12	25	10
	Dryburgh	Flat. & Cot.	—	—	110	314	78	—
	Clement Park	Ten. & Cot.	—	26	100	153	41	7
	Blackshade	Per. Alum.	—	—	75	—	—	—
	Foggyley	Flat. & Cot.	—	56	294	32	—	—
	Whorterbank	M.S. Flat. & Maisonettes	—	98	176	35	7	—
	Lansdowne	M.S. Flat. & Cot.	—	60	123	—	—	—
	Ardler	Courtyard, M.S. Flat. & Mais.	8	843	1,981	115	5	—
	Kirk Street C.D.A.	Tenement & Multi-Storeys	—	240	328	24	—	—
4.	Arklay Street	Tenement	—	252	252	—	—	—
	Wolseley Street	do.	32	4	24	—	—	—
	Mid Craigie	Ten. & Cot.	32	136	696	284	60	—
	Morgan Street	Tenement	—	—	18	54	—	—
	Montgomerie Avenue	Trad. O.P.H.	—	6	—	—	—	—
	Midmill, 1st Dev.	M.S. Flat. & Cot.	—	84	176	76	—	—
	Happyhillock, 1st Dev. North	Flat. & Cot.	—	61	37	8	—	—
	Happyhillock, 1st Dev. South	do.	—	32	67	8	—	—
5.	Graham Street	Flatted	—	72	376	72	—	—
	Linlathen	Flat., Mais. & Cot.	32	24	297	344	98	—
	Mains of Fintry	Flat., Ten. & Cot.	—	—	252	220	—	—
	Trottick	M.S., Flat & Cot.	—	—	171	21	6	—
	Granton Terrace	Cottages	—	—	—	71	—	—
	Mill of Mains	do.	—	64	120	65	—	—
6.	Hospital Park	Flatted	—	—	100	—	—	—
	Stirling Park	do.	—	—	136	—	—	—
	Dudhope	Flat. & Ten.	—	70	120	—	—	—
	Alpin Road	Flat. & Bung.	—	52	165	—	—	—
	Lawton	Flatted	—	12	536	—	—	—
	Law Crescent	do.	—	64	196	—	—	—
	Lawton Road	Tenement	—	—	112	—	—	—
	Byron Street	do.	—	36	48	—	—	—
	Glenprosen Terrace	Flatted	—	24	68	—	—	—
	Wester Clepington	Tenement	—	192	288	—	—	—
	Clepington Road	do.	—	36	60	—	—	—
	Wedderburn Street/Hepburn Street	do.	—	20	42	—	—	—
	Hospital Street	do.	—	12	36	—	—	—
	Gardner Street	do.	—	—	30	—	—	—
	Strathmore Avenue	do.	—	—	54	—	—	—
	Rankine Street	O.P.H. Trad.	—	3	8	—	—	—
	Elgin Terrace	Cottages	—	—	43	63	—	—
7.	Magdalene's Kirkton	Ten., Flat. & Cot.	—	12	470	542	158	42
	West Kirkton	Flat. & Cot.	—	2	71	618	124	28
	St. Mary's	Ten., Flat. & Cot.	—	70	843	807	14	—
	West March	Trad.	—	—	196	108	—	—
8.	Camperdown	Ten. & Cot.	—	384	1,697	483	—	—
	Menzieshill	Ten., Cot. & Mais.	121	600	1,573	350	—	—
9.	Logie	Ten. & Flat.	—	96	166	—	—	—
	Tullideph Road	do.	—	42	66	—	—	—
	Benvie Road, Nos. 22/26 and No. 30 Cleghorn Street	Tenement	—	—	18	6	—	—
	Polepark	do.	—	—	48	24	—	—
	Rosefield Street, Nos. 17/19	do.	4	—	6	—	—	—
	City Road	Ten. & Cot	—	44	320	70	—	—
	Pleasance	Maisonettes	9	—	21	3	—	—
	Scott Street, Nos. 47/51	Tenement	—	18	—	—	—	—
	Milnbank Road	do.	—	—	28	14	—	—
	St. Mary C.D.A.	M.S., Flat. & Cot.	4	46	84	6	2	—
	Ancrum Place	O.P.H. Trad. & Flat.	30	30	—	—	—	—
10.	Douglas and Angus	Ten. Flat. & Cot.	—	129	1,624	928	—	—
	Craigie	do.	7	240	465	77	—	—
	Douglas Road	Flatted	—	17	—	—	—	—
	Whitfield	Ten., Flat., Cot. & Mais.	—	1,088	1,461	106	264	—
11.	Forthill	Flatted	—	68	140	—	—	—
	Queen Street	Tenement	—	6	54	—	—	—
	King Street, Nos. 191/193	do.	—	3	6	—	—	—
	Long Lane, Nos. 79/87	do.	—	—	18	—	—	—
	Manor Place, Nos. 1/3	do.	—	—	8	4	—	—
	Nursery Road	Mais. & Cot.	31	—	56	15	—	—
	King Street	Tenement	—	—	16	4	—	—
	Strathmore Street	Cot. & Flat.	—	144	194	63	2	—
12.	Hospital Park	Flatted	—	52	—	—	—	—
	Sandeman Street	Tenement	—	—	112	90	—	—
	Moncur Crescent	do.	—	18	66	—	—	—
	Carnegie Street, Nos. 60/62	do.	—	—	12	—	—	—
	Constitution Street, No. 18 and No. 61 Rosebank Street	do.	—	3	6	—	—	—
	Canning Street	do.	—	—	60	—	—	—
	Kinghorne Road, Nos. 29/35	do.	—	18	5	3	—	—
	Harcourt Street, No. 19	do.	—	—	6	—	—	—
	Paterson Street, No. 8	do.	—	—	6	—	—	—
	Ogilvie's Road, Nos. 1/3 and No. 7 Constitution Street	do.	—	—	15	—	—	—
	Hilltown, Nos. 201/219	do.	—	3	12	—	—	—
	Hill Street, Nos. 28/32	do.	—	—	18	—	—	—
	Fairbairn Street	do.	—	56	24	24	—	—
	Derby Street C.D.A.	Mais. & Flat.	18	71	—	28	—	—
	Maxwelltown C.D.A.	Multi-Storey	6	29	446	72	26	—
		TOTALS	374	6,273	19,562	7,003	945	87

"B" Houses Erected by Scottish Special Housing Association

Ward	Scheme or Site	Type	Number of Houses Completed Apartments					
			1	2	3	4	5	6
1.	Dean Avenue	Cottages	—	—	—	2	—	—
3.	Dryburgh House Site	Tenements	—	4	119	1	—	—
5.	Mains of Fintry	Ten., Flat. & Cot.	—	—	1,254	1,402	14	—
7.	Magdalene's Kirkton	Flat. & Cot.	—	—	—	120	—	—
	Americanmuir Road	Cottages	—	—	63	33	—	—
8.	Kingsway West	Ten. & Cot.	—	—	80	46	—	—
		TOTALS	—	4	1,516	1,604	14	—

"C" Temporary Housing

Ward			Number of Houses Still Occupied Apartments					
			1	2	3	4	5	6
6.	....	....	—	—	3	—	—	—
9.	....	....	—	—	6	—	—	—
		TOTAL	—	—	9	—	—	—

"D" The Corporation of Dundee as Trustees

Ward	Scheme or Site	Type	Number of Houses Completed Apartments					
			1	2	3	4	5	6
12.	Fleming Trust Deed—Easter Clepington	Flatted	192	158	146	—	—	—
	Peter Gray Housing Trust—Kinghorne Road	Tenement	24	—	—	—	—	—
		TOTALS	216	158	146	—	—	—

GRAND TOTALS — "A", "B", "C" and "D"	1	2	3	4	5	6
	590	6,435	21,233	8,607	959	87

DETAILS — GENERAL

TABLE VIII.

Loci and details of houses in course of construction by Corporation at end of 1970 (from data supplied by the Director of Housing).

Scheme or Site	Type	Apartments 1	2	3	4	5	6	Wards 1	2	3	4	5	6	7	8	9	10	11	12
Whitfield																			
5/6 Phase 1	Flat. & Cot.	—	—	50	23	—	—	—	—	—	—	—	—	—	—	—	73	—	—
5/6 Phase 2	Flat. & Cot.	—	—	240	110	—	—	—	—	—	—	—	—	—	—	—	350	—	—
Skarne Phase 1	Flat. & Mais.	—	42	102	24	—	—	—	—	—	—	—	—	—	—	—	168	—	—
Skarne Phase 2	Flat. & Mais.	—	309	474	174	—		—	—	—	—	—	—	—	—	—	957	—	—
Trottick 2/3/4 Devs.	Flat. & Cot.	—	94	194	21	—	—	—	—	—	—	309	—	—	—	—	—	—	—
Mill of Mains	Flat., Cot. & Mais.	—	252	132	140	—	—	—	—	—	—	524	—	—	—	—	—	—	—
Craigie Drive 4th Dev.	Flat. & Cot.	—	72	57	35	—	—	164	—	—	—	—	—	—	—	—	—	—	—
Derby Street C.D.A.	Multi-Storey	—	—	374	—	—	—	—	—	—	—	—	—	—	—	—	—	—	374
Kirk Street 2nd Dev.	Flat	—	—	91	39	—	—	—	—	130	—	—	—	—	—	—	—	—	—
	TOTALS	—	769	1,714	566	—	—	164	—	130	—	833	—	—	—	—	1,548	—	374

TABLE IX.

DWELLINGHOUSES DEMOLISHED during 1970

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
(a) Dwellinghouses that had been Closed by Order, Demolition Order, etc.	75	164	38	7	284
(b) Houses that had been Voluntarily Closed ...	25	25	4	2	56
(c) Prefabricated Temporary Houses	—	—	177	—	177
(d) Houses in Comprehensive Development Areas	24	141	41	31	237
TOTALS	124	330	560	40	754

In addition to the above, 51 shops and other premises were demolished.

TABLE X.

	1 Room	2 Rooms	3 Rooms	4 Rooms & Over	Total
Houses improved during 1970 after plans had been submitted to and approved by the Buildings Authority	—	28	68	25	121

TABLE XI.

Other Particulars from Department's Records

1. Estimated Total Number of Houses in City and Sanitary Facilities thereanent:—

Total Number of houses	71,530
Number with internal water supply ...	71,526 or 99.9%
Number with internal water closet ...	58,726 or 82.1%
Number with shared outside water closet	12,710 or 17.8%
Number with internal bath	49,220 or 68.8%
Number without bath	22,310 or 31.2%

2. Houses with External Water Supply:—

Ward	No. of Houses	ROOMS 1	2	3	4 and over	WATER SUPPLY On Stairs, Landings etc.	In Courts, Rural Areas, etc.
1	3	2	1	—	—	3	—
8	1	—	—	1	—	—	1
TOTALS	4	2	1	1	—	3	1

The 4 houses recorded above are Voluntarily Closed under the Housing Acts although still occupied.

3. Position regarding Privies and Chemical Closets:—

WARD	Conveniences	SERVING Houses	SERVING Other Premises
8	1	1	—
10	1	1	—
11	1	1	—
	3	3	—

The 3 conveniences shown above are classified as follows:—

Privies	2	Serving Houses
Chemical Closets	1	

The 3 houses recorded are the subjects of Closing, etc. Orders and will not be relet when the present occupiers remove.

Atmospheric Pollution

The seven atmospheric pollution measuring stations continued in operation during the year at the undernoted sites:—

STATIONS			
No.	Name	Site	Instruments
2.	Macalpine	West King's Cross Hospital, Macalpine Road.	Deposit Gauge and Lead Peroxide Instrument.
3.	Clepington	Maryfield Hospital, Mains Loan.	do.
5.	Mayfield	Mayfield Hostel, 169 Arbroath Road.	do.
7.	Constitution	Constitution Road Clinic, 55 Constitution Road.	Daily Smoke Filter and SO_2 (Volumetric) Apparatus.
8.	Balgay	Royal Victoria Hospital, Jedburgh Road.	Deposit Gauge and Lead Peroxide Instrument.
10.	Craigie	Craigie House Residential Home, Southampton Road.	do.
11.	Commercial	Sanitary Department, 93 Commercial Street.	Daily Smoke Filter and SO_2 (Volumetric) Apparatus.

The number allocated to each Station is that given by the Air Pollution Division of Warren Spring Laboratory who, under the auspices of the Department of Trade and Industry and in collaboration with local authorities and other co-ordinating bodies, continue to investigate the problems of atmospheric pollution on a National basis.

A total of 191 visits were made to the Stations during the year for the purposes of supervision and the changing over of equipment, etc.

Deposit Gauges and Lead Peroxide Instruments

The results for the year are shown in the following tables:—

Station	Deposit Gauges Average Monthly Total Solid Deposit (Tons/sq. Mile)	Lead Peroxide Instruments Daily Average Concentrations of Sulphur Dioxide in Arbitrary units (milligrammes of SO_3 per 100 sq. centimetres per day)
No. 2 "Macalpine"	9.55	0.64
No. 3 "Clepington"	7.71	0.79
No. 5 "Mayfield"	8.73	0.56
No. 8 "Balgay"	6.84	0.39
No. 10 "Craigie"	12.2	0.38

The foregoing Total Solid Deposit figures are representative of the following:—

TONS DEPOSIT			
PER MONTH		PER ANNUM	
Per Sq. Mile	Over City as a Whole	Per Sq. Mile	Over City as a Whole
9.01	173.07	108	2,077

Comparisons of results obtained with those from previous years are shown below:—

YEAR	DEPOSIT GAUGES Average Monthly Total Solid Deposit in Tons		LEAD PEROXIDE INSTRUMENTS Mean Daily Average Concentration of SO_2 in Arbitrary Units (mgms. of SO_3/100 sq. cms./day)
	Per Sq. Mile	Over City as a Whole	
1958	12.33	236.8	0.60
1959	11.13	213.8	0.64
1960	10.41	199.97	0.66
1961	8.6	165.12	0.57
1962	8.02	154.06	0.58
1963	9.37	179.9	0.55
1964	7.8	149.8	0.57
1965	8.36	160.59	0.48
1966	9.63	184.99	0.55
1967	8.1	155.6	0.59
1968	8.16	156.7	0.57
1969	9.22	177.1	0.55
1970	9.01	173.07	0.55

The average solid deposit, as will be seen, was slightly less than that for the previous year, while the mean daily average concentration of sulphur dioxide in arbitrary units was the same as that for 1969.

As has been the case on occasion in recent years, interference with the apparatus at some of the Stations by vandals meant that no solid deposit results were obtained for certain of the months at the Stations concerned. It is felt, therefore, that the time has now come when consideration ought to be given to dispensing with the use of Deposit Gauges and Lead Peroxide Instruments altogether, and providing in their place a suitable number of the Daily Smoke Filter and SO_2 (Volumetric) type of apparatus. This is the policy now recommended by Warren Spring Laboratory, and it is the intention to place a report before the Corporation before the 1972/73 estimates are prepared, recommending that this should be done, and detailing the costs thereof.

Daily Smoke Filters and Sulphur Dioxide (Volumetric) Apparatus

The Daily Mean Concentrations of Smoke and Sulphur Dioxide recorded at Stations Nos. 7 and 11 were as follows:—

No. 7 "CONSTITUTION"

MONTH	SMOKE (Concentration in microgrammes per cubic metre)			SO_2 (Concentration in microgrammes per cubic metre)		
	Lowest Value	Highest Value	Average Value	Lowest Value	Highest Value	Average Value
January	7	205	69	33	258	126
February	11	83	44	58	178	106
March	3	64	27	39	129	77
April	11	70	29	20	169	85
May	4	48	20	34	229	85
June	4	28	15	33	140	67
July	2	24	10	20	125	50
August	6	35	14	20	73	49
September	2	85	24	20	146	69
October	2	117	36	39	190	88
November	4	138	50	20	60	97
December	12	138	50	41	202	106
During the Year	2	205	32	20	258	84

No. 11 "COMMERCIAL"

MONTH	SMOKE (Concentration in microgrammes per cubic metre)			SO_2 (Concentration in microgrammes per cubic metre)		
	Lowest Value	Highest Value	Average Value	Lowest Value	Highest Value	Average Value
January	3	202	76	31	380	144
February	14	80	41	42	293	160
March	10	66	28	59	252	145
April	9	77	28	59	188	118
May	11	54	24	44	236	96
June	5	28	15	26	162	73
July	3	28	13	28	173	80
August	7	42	17	33	118	58
September	5	120	32	36	158	96
October	11	181	53	22	389	138
November	12	144	56	57	258	125
December	8	165	55	82	360	188
During the Year	3	202	36	22	389	118

Comparisons of the average results obtained during 1970 with those for previous years are shown below:—

YEAR	SMOKE FILTERS Daily Mean Smoke Concentration (Microgrammes/cu. metre)			SO$_2$ APPARATUS Daily Mean SO$_2$ Concentration (Microgrammes/cu. metre)		
	Lowest Value	Highest Value	Average Value	Lowest Value	Highest Value	Average Value
1959	15	1,443	213	0	403	77
1960	22	1,663	213	3	326	92
1961	15	1,102	164	6	343	83
1962	11	1,010	132	13	304	86
1963	7	681	110	0	379	98
1964	3	614	84	0	371	110
1965	8	435	77	14	391	94
1966	5	435	82	0	317	78
1967	7	253	62	0	281	77
1968	3	296	62	13	241	76
1969	4	256	47	6	309	87
1970	2	205	34	20	389	101

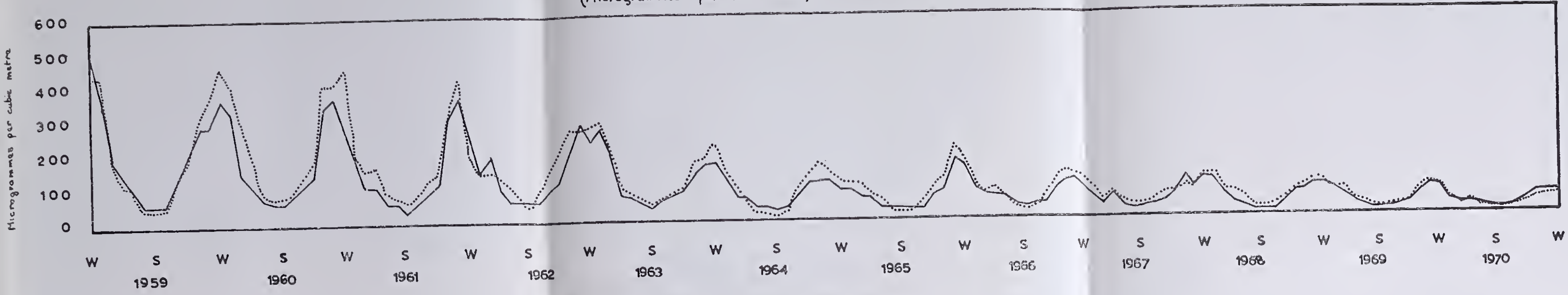
The average for smoke concentrations recorded by the filters at these two Stations, at 34 microgrammes per cubic metre of air, reached an all-time low for this type of apparatus, and was a mere 15.9 per cent. of the average concentration recorded during 1959 and 1960, the first two full calendar years that this type of apparatus had been in operation in the City area.

The average sulphur dioxide concentration was considerably higher than that for 1969, and it is somewhat significant that the increased average was due to the high concentrations recorded at Station No. 11; could the explanation be, in some degree at least, to the influence of diesel fumes from the ever growing preponderance of vehicular traffic in the central area of the City?

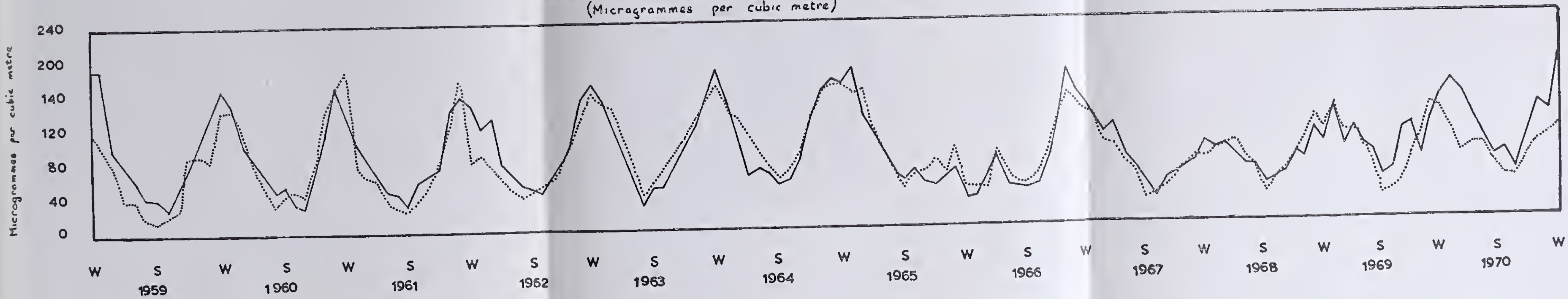
The following graphs not only show the seasonal fluctuations of pollutants in the atmosphere but also highlight the encouraging downward trend so far as smoke content is concerned.

STATIONS No 6 'CAIRD' / No 11 'COMMERCIAL' AND STATION No 7 'CONSTITUTION'

AVERAGE DAILY MEAN SMOKE CONCENTRATION
(Microgrammes per cubic metre)



AVERAGE DAILY MEAN SO_2 CONCENTRATION
(Microgrammes per cubic metre)



S SUMMER

W WINTER

——— STATION No 6 "CAIRD" (January 1959 to March 1967) and STATION No 11 "COMMERCIAL" (April 1967 onwards)

.... STATION No 7 "CONSTITUTION"

Clean Air Acts, 1956 and 1968

Section 1 of the 1956 Act (Dark Smoke Emission from Chimneys); Section 16 of the 1956 Act (Smoke Nuisances); Section 1 of the 1968 Act (Dark Smoke Emission from Industrial or Trade Premises, otherwise than from a Chimney).

Particulars of complaints lodged with the department and contraventions discovered and dealt with under these Sections are detailed below:—

	Section 1 of the 1956 Act	Section 16 of the 1956 Act	Section 1 of the 1968 Act
Complaints received	30	58	17
Contraventions discovered by staff during routine inspections	34	2	7
Total	64	60	24
Remedied	55	60	24

Some 671 visits, incluing 51 to industrial and other large boiler plants, were made in connection with the above matters. In addition, 42 official "observations" were carried out on chimneys serving boiler units to ascertain if the smoke emitted kept within or exceeded the limits laid down in the Dark Smoke (Permitted Periods) (Scotland) Regulations, 1958.

Statutory Notices issued in connection with contraventions under this heading totalled 22—nine in respect of contraventions of Section 1 of the 1956 Act and thirteen concerning contraventions of Section 1 of the 1968 Act.

Legal proceedings were instituted regarding 1 contravention, details being given later; verbal warnings were issued to other offenders, mainly in connection with contraventions deemed to be of a minor nature and not likely to be repeated.

Included in the list of contraventions under Section 1 of the 1956 Act are three in respect of excessive emmissions of smoke from one particular chimney serving a coal-fired boiler unit equipped with low-ram coking stokers. The firm concerned sought the assistance of the National Industrial Fuel Efficiency Service to advise on correct operational technique and plans are now being made to have the boiler converted to oil-burning.

Improper use of the manual controls of oil-fired ovens at a bakery was the cause of periodical emissions of smoke in excess of that legally permitted, and arrangements have been put in hand to re-equip the units and introduce the use of 35 seconds viscosity oil in lieu of the 200 seconds fuel being used at present. This measure will undoubtedly solve the problem.

A number of the cases of excessive dark smoke emissions from units at industrial and commercial premises were resolved when solid fuel boilers were replaced by oil-burning units.

Most of the other contraventions of Section 1 of the 1956 Act were due either to improper use of manual controls of boiler units or the development of temporary faults.

As in previous years, contraventions in terms of Section 16 of the 1956 Act related in the main to the burning of garden refuse in bon-fire fashion. In each of these cases, the parties involved, all first offenders, were given a verbal warning and this obviously had the desired effect as no further complaints were received from the original complainers, who had all agreed to inform the department of any recurrence of the nuisance.

A complaint of some concern, however, related to nuisance by the emission of smoke from the chimney of a factory incinerator located immediately opposite and a mere 20 yards from the windows of a dwellinghouse. Representations were made to the firm's manager and as a result the incinerator unit was removed to another site within the factory precincts well removed from dwellinghouses and at a point where the light smoke emitted will not cause nuisance or annoyance to others.

Another nuisance quickly remedied in a somewhat similar fashion was that caused by smoke and fumes discharged from the flue pipe serving a solid fuel burning heating stove at garage premises. The flue terminal was such that, on occasion, emissions therefrom found their way into the complainer's dwelling by a bedroom window immediately opposite and only a few feet away. The problem was solved when the garage proprietor re-positioned and heightened the flue so that it terminated at a point well away from and above the window concerned.

Although a total of 17 complaints were received concerning emissions of dark smoke in contravention of Section 1 of the 1968 Act, in only six cases was the matter brought to the notice of the department in sufficient time for an inspecor to arrive at the locus and witness the emissions for himself. In each of these instances, as also in the case of seven contraventions discovered and witnessed by members of the staff during routine patrol duties, a Statutory Notice was served on the occupier of the premises involved. Court action was also taken against one of the offenders. In other cases where the investigating officer was not present at the time the burning took place but ashes and other charred debris indicated that trade waste had in fact been burned, the offenders were given a verbal warning.

The case which resulted in prosecution concerned the emission of dark smoke at a scrap merchant's yard caused by the burning of car upholstery and an old motor tyre. The offender had been warned for the same sort of offence on two previous occasions by the inspectorate of this department. The Sheriff imposed a fine of £3; but the maximum penalty for an offence of this nature is a fine of £100.

When the attention of another scrap merchant who was discovered burning waste oil on his premises was directed to the fire hazard he was creating amongst what could only be described as a hetrogeneous collection of timber, rags and other inflammable materials, he immediately called in the Fire Authorities who quickly quenched the fire. This merchant, needless to say, no longer disposes of materials by burning.

Section 3 of the 1956 Act—223 notifications of proposal to install new furnace/boiler units, as required under sub-section (3) of this Section, were made to the department. In connection therewith, and in respect of a number of similar notifications received during 1969, a total of 224 visits were made by the inspectors to the premises involved.

Applications and plans lodged with the Planning Department and the Buildings Authority continue to be carefully scrutinised, and in cases where furnace or boiler installations are indicated architects, consultants or other parties concerned are contacted; where necessary they are provided with a pro forma upon which the appropriate particulars may be forwarded to this department, and notifications in this manner is accepted as meeting the "notice of proposal to install" requirement under the said sub-section (3).

New installations of note completed during the year under review are summarised in the following table:—

Notable New Furnace/Boiler Installations completed during 1970

Nature of Premises			New Furnace/ Boiler Installs.	Adaptations, etc. to Existing Boiler Plant	Type of Fuel			Type of Stoker, Burner, etc.	Remarks
Factories	Shops, Offices, etc.	Other Premises			Solid Fuel	Oil	Gas		
13	9	89	124	—	—	35	89	Automatic Burner	New and reconstructed premises and new dwelling-houses.
6	3	6	17	—	—	17	—	do.	Replaced 17 boiler units — 10 hand-fired, 3 equipped with mechanical stokers and 4 equipped with oil burners.
—	—	27	27	—	—	18	9	do.	Replaced domestic boilers and/or open fires.
3	—	1	4	—	—	4	—	do.	Additional boilers.
—	—	1	1	—	1	—	—	Hand-fired	Incinerator equipped with gas jets.
22	12	124	173	—	1	74	98		

Installations completed at new Corporation premises during the year included two oil-fired boilers at Craigie High School, a gas-fired boiler and six gas-fired warm air units at Barnhill Primary School, and the replacement of a hand-fired solid fuel burning sectional boiler by a new and gas-fired unit at Bellfield Nursery School. At five other educational establishments the boilers were converted to enable 35 seconds viscosity oil to be burned where, formerly, the fuel used was of either 950 or 200 seconds viscosity. Another new installation was a gas-fired boiler at a laundrette.

Details of the Total Numbers of Notable New Boiler/Furnace Installations and Major Alterations carried out within the City since the Clean Air Act 1956, came into operation are as follows:—

Years	Nature of Premises			New Furnace/ Boiler Installations	Adaptations, etc. to Boiler Units	Type of Fuel			Categories of Solid Fuel Burning Units
	Factories	Shops, Offices, etc.	Other Premises			Solid Fuel	Oil	Gas	
1957-1970 inclusive	247	119	519	1,069	—	135	603	331	51 — Handfired (5 coal, 46 coke and anthracite).
									49 — Under-feed stokers.
									3 — Low-ram coking stokers.
									4 — Wide-ram coking stokers.
									6 — Chain-grate stokers.
									2 — Gravity hopper feed.
									2 — P.F. atritor systems.
									1 — Pneumatic sprinkler feed.
									5 — Incinerators with gas jets.
									12 — Incinerators with oil or gas after-burners.
	57	8	44	—	149	52	97	—	25 — Under-feed stokers.
						(a)	(b)		3 — Low-ram coking stokers.
									1 — Wide-ram coking stoker.
									16 — Chain-grate stokers.
									7 — Sprinkler stokers.

(a) Mechanical stokers fitted.

(b) Oil burners fitted to boiler units formerly burning solid fuel.

Section 6 of the 1968 Act—Chimney Heights. Conform to the provisions of this Section, 14 applications were received by the department during 1970 requesting formal approval of chimney heights, all in relation to new boiler units burning liquid (oil) fuel at a rate equivalent to 1.25 x 10^6 or more B.T.U.'s per hour.

After thorough site checking and investigation, and after due consultation where necessary with architects, heating consultants, etc., it was found possible to grant approval in every case—although a compromise had to be arrived at in one or two instances to meet certain difficulties.

Worthy of special note are two chimneys which, when erected, will constitute landmarks in their particular areas, one being the 145 ft. stack to be erected at the new Swimming Baths/Landfall Area Development and the other the 168 ft. stack in connection with the new Michelin Tyre Factory.

The usual close liaison continues with the Heating Division of the Chief Architect's Department relative to the heights of chimneys to serve boiler units at new Corporation premises.

With regard to installations outwith the categories requiring official approval of chimney heights in terms of this Section—that is to say, units not burning pulverised fuel or burning less than 100 lbs. solid fuel/hour or liquid or gas fuel at a rate less than 1.25 x 10^6 B.T.U.'s/hour—the department continues to co-operate closely with the Buildings Authority concerning the question of chimney or flue terminals, particularly those to which Regulations F.31 of the Building Standards (Scotland) (Consolidation) Regulations, 1970 applies.

Sections 11—15 of the 1956 Act—Smoke Control Areas. The City's eleventh Smoke Control Area Order—Downfield East—was confirmed by the Secretary of State on 31st July, 1970, and is due to come into operation on 1st October, 1971. Statistics relative thereto are available in the table shown later.

It is of interest to record that the exemption from the requirements of Section 11 of the Act provided for by the Dundee (Coldside) Smoke Control Area Order, 1966, Variation Order, 1966, terminated on 31st December, 1970. This exemption, as was stated in an earlier Annual Report, related to houses and other premises which, in addition to being situated within the boundaries of the Coldside Smoke Control Area, are also part of the Coupar Street Comprehensive Development Area. It was anticipated that demolition of these buildings would have been completed by the date mentioned, but as the Coupar Street project has been further delayed it was necessary to provide for continuance of exemption for a longer period, and this has been provided for until 31st December, 1975, by way of another Variation Order.

A total of 15,658 visits were made during the year to houses and other premises within established or proposed Smoke Control Areas, either during survey or for the purpose of supervising or inspecting the alteration or replacement of fireplaces, etc. The department was also called upon to deal with 19 complaints from householders concerning such matters as defective fireplaces, faulty appliances and operational difficulties.

In the course of patrol duties, either routine or as a follow-up to complaints or reports received concerning emissions of smoke from dwellinghouse chimneys in Smoke Control Areas, 21 contraventions of Section 11 were discovered. As a result, 11 Statutory Notices were issued and 10 verbal warnings given to the householders concerned.

Phased Programme. When the Downfield East Smoke Control Order comes into operation on 1st October, 1971, 6,282 acres (51.1 per cent. of the City's total area), 33,693 dwellings (48.1 per cent. of the City's houses) and 2,021 other premises will have been brought within the Smoke Control Area provisions of the Clean Air Act.

The following table gives details of Dundee's eleven Smoke Control Areas:—

AREAS	Operative Date of Order	Acreage of Land	No. of Houses*				No. of* Other Premises
			Local Authority	S.S.H.A.	Private	Total	
Menzieshill	1/10/59	525	2,648	—	142	2,790	48
Glamis Road	1/4/61	230	1	—	986	987	49
Balgay	1/10/61	268	495	—	394	889	124
Camperdown	1/10/61	675	2,577	126	6	2,709	76
Whitfield	1/10/61	560	2,979	—	12	2,991	20
West End	1/10/63	524	710	—	2,168	2,878	396
Downfield West	1/10/65	1,282	5,133	96	801	6,030	232
Lochee	1/10/66	552	2,904	124	636	3,664	449
Coldside	1/10/67	365	2,072	—	1,258	3,330	211
Law	1/10/68	207	396	—	3,084	3,480	245
Downfield East	1/10/71	1,094	2,583	120	1,242	3,945	171

*Does not include houses and other premises which still exist within the Areas but, for various reasons, were exempted from the provisions of Section 11 of the Act by the appropriate Smoke Control Area Order.

Section 9 of the 1968 Act—Acquisition and Sale of Unauthorised Fuel in Smoke Control Areas. Three householders residing in Smoke Control Areas who were discovered burning bituminous coal in their grates provided information regarding their suppliers who were thereupon given a written warning and informed that any further offence of this nature would be reported to the Procurator Fiscal. The householders themselves were, of course, also warned about the offence they were committing.

New Clean Air Legislation. The Smoke Control Areas (Exempted Fireplaces) (Scotland) Order, 1970, came into operation on 31st August, 1970, and consolidated exemptions from the provisions of Section 11 of the Clean Air Act, 1956, provided for by former Orders as well as introducing certain amendments.

Hitherto, for example, exemption was available in respect of furnaces (other than those burning pulverised fuel) which were equipped with mechanical stokers and had been installed or fitted with such stokers on or after 31st December, 1956. This new Order, however, means so far as furnaces installed or equipped with mechanical stokers on or after 31st August, 1970, are concerned, that with the exception referred to below, a general exemption will only be available if they have a heating capacity exceeding 150,000 B.T.U.'s/hour.

The exception referred to was introduced by the Smoke Control Areas (Exempted Fireplaces) (Scotland) (No. 2) Order, 1970, which came into operation on 5th December, 1970, and provided for conditional exemption from Section 11 of the 1956 Act in respect of the unit known as the Triancomatic T.80, which has an output of 80,000 B.T.U.'s/hour, is manufactured by Trianco Ltd. and has an automatic worm-feed to convey the fuel from bunker to combustion chamber.

The conditions laid down are that no fuel shall be used in the unit other than selected washed coal singles, that it shall be so installed, maintained and operated as to minimise the emission of smoke and in accordance with the manufacturer's instructions.

The Smoke Control Areas (Authorised Fuels) (Scotland) Regulations, 1970, which came into operation on 12th December, 1970, added "XL Briquettes" to the list of authorised fuels. These briquettes are manufactured and subjected to a mild heat treatment process by a local firm, Taylor Brothers (Dundee) Ltd., and comprise approximately 97% by weight "Coalite" Breeze (or "Homefire" Char) and Welsh Anthracite duff. The remaining weight consists of borax and starch. The initial output per annum will be in the region of 2,500 tons but it is envisaged that this will increase to 7,500 tons.

Factories Act, 1961

The following table details the numbers and types of factories on the register at the end of 1970:—

TRADE or BUSINESS	Mechanical Factories	Non-Mechanical Factories
Blacksmiths, Carriage Builders, etc.	7	—
Boot Repairers, Saddlers, etc.	18	—
Building and Associated Trades	83	2
Coal, Firewood and Timber Merchants	10	—
Dental Mechanics, etc.	19	—
Dress and Mantle Makers, Furriers, Milliners, etc.	11	2
Engineering (Light and Heavy)	63	—
Engineers (Electrical, Radio and T.V., etc.)	54	—
Engineers (Motor Vehicle Repairs, etc.)	147	—
Food Manufacturers, Packers and Canners, Bottlers, etc. ...	110	1
Launderers, Dyers and Dry Cleaners	29	—
Musical Instrument and Sports Equipment Repairs	5	1
Photographers and Picture Framers	6	1
Printers, Ticket Writers, etc.	31	—
Tailors	16	—
Textile Spinners, Weavers and Calendrers	80	—
Upholsterers, Cabinetmakers, etc.	21	—
Waste, Rag and Metal Merchants	10	—
Watch and Jewellery Repairers, Opticians, etc.	4	—
Miscellaneous	37	4
	761	11

There were also 39 other premises, such as sites of building operations, etc., to which Section 7 of the Act applies and is enforceable by the Local Authority.

The inspectorate paid 262 visits to factory premises during the year under review. This number, however, does not include visits to food manufacturing and bakehouse premises which are also factories within the meaning of the Act but are dealt with and reported upon separately in the Food Section of the Report. Such visits are, of course, made routinely or for the purpose of investigating matters reported to the department by H.M. Inspector of Factories or factory employees.

Visits were also made where necessary to sites of building operations to establish that suitable and sufficient sanitary accommodation was being provided and maintained for the use of workmen—another requirement of the Act.

The houses of persons on the Local Authority's list of Outworkers in terms of Section 133 of the Act were also visited to ensure that the work undertaken—usually the making and alteration of wearing apparel—was being carried out under satisfactory and hygienic conditions.

Contraventions dealt with under the Factories Act and remedied during the year are categorised in the following statement.

Contraventions Reported/Discovered					Contraventions Remedied			
(a) Notified by H.M. Inspector of Factories	(b) Reported by Employees, etc.	(c) Found during Routine Inspection	Totals	Nature of Contravention	(a) Notified by H.M. Inspector of Factories	(b) Reported by Employees, etc.	(c) Found during Routine Inspection	Totals
—	—	—	—	Lack of Cleanliness (Sec. 1)	—	—	—	—
—	—	—	—	Overcrowding (Sec. 2)	—	—	—	—
—	—	—	—	Unreasonable Temperature (Sec. 3)	—	—	—	—
—	—	—	—	Inadequate Ventilation (Sec. 4)	—	—	—	—
—	—	—	—	Ineffective Drainage of Floors (Sec. 6)	—	—	—	—
				Sanitary Conveniences (Sec. 7)				
1	—	—	1	(1) Insufficient	2	—	—	2
25	2	23	50	(2) Unsuitable or Defective	25	2	42	69
—	—	—	—	(3) Not Separate for Sexes	—	—	—	—
				Building Operations:				
—	—	2	2	Insufficient, Unsuitable or Defective Sanitary Conveniences	—	—	2	2
26	2	25	53	TOTALS	27	2	44	73

Only in one instance was it found necessary to institute legal proceedings during the year. This concerned the lack of a suitable intervening ventilated space between the workroom of a dry cleaner's premises and the sanitary convenience provided for the use of the female employees. The proprietor had indicated that he was acting purely under a sense of grievance in refusing to do the necessary work since he was being "rated" by the Corporation as an occupier of "shop" premises; if his premises were to be classified as a "factory" the local rates he would have to pay would be a good deal less. Consultation with H.M. District Inspector of Factories confirmed that, in our opinion, the premises could quite definitely be classified as a factory in terms of Section 175 (1) (b) of the Factories Act. After very considerable legal debate, the Sheriff found the accused "Not Guilty" on the grounds of lack of evidence as to whether the premises constituted a factory or a shop. The Sheriff also pointed out to the accused, however, that, either way, the Sanitary Authorities could insist on the work being done since an intervening ventilated space was required not only under the Factories Act but also under the Offices, Shops and Railway Premises Act.

Noise Abatement Act, 1960

Complaints lodged with the department concerning nuisance and annoyance being experienced from noise and vibration continue to increase and reached a record total of 52 during the year. In dealing with these, some 303 visits by the inspectorate were necessary, and although this number may at first sight appear to be excessive it merely serves to illustrate how prolonged and complex investigations of this type of complaint can be on occasion. By the end of the year 42 such matters had been successfully resolved; others were in process of further investigation or awaiting the application of requisite remedial measures.

Details as to the origins of complaints dealt with are as follows:—

COMPLAINTS	ORIGIN OF NOISE		
	Industrial/Commercial	Domestic	Pneumatic Drills
Received	33	9	10
Abated	23	9	10

As in previous years, the sources of the trouble were quite varied and the following are considered worthy of comment.

A subject of complaint lodged by the occupier of a nearby dwelling was the noise and disturbance resulting from the intermittent use of the sonic vehicle washing unit and the steam generating equipment at a bakery distribution depot. The problem was solved, however, when the washing unit was replaced by another and almost silent model and a modified outlet jet fitted to the steam generator which reduced the noise produced by it to a tolerable level.

The introduction of a night-shift in lieu of normal day-time work at a light engineering factory during the Electricity Power Workers' dispute in December gave rise to complaints from householders residing in the immediate vicinity. A principal of the firm explained that the change had been made to obviate valid difficulties and delay which would have occurred if a power-cut was made while their metal melting cupolas were in operation. The firm was most co-operative and ceased night working immediately the dispute was settled. The disturbance complained of, therefore, only lasted for three nights.

A petition was received from occupiers of tenemental dwellings regarding noise nuisance from the nearby depot of a plant hire firm. Noise resulting from maintenance operations carried out at the workshop was complained of, but the main complaint concerned the noise of heavy diesel vehicles such as mobile cranes which occasionally passed to and from the depot during the nights hours. At appropriate times, sound level readings were taken from points outside the complainers' dwellings and although, naturally, these were well above the ambient level they were nevertheless comparable with the sounds of heavy traffic on the adjacent busy thoroughfare. The noises complained of were also, of course, of short duration. When the matter was raised with the firm's foreman, he pointed out the necessity that, on occasion, units had to leave the depot in the early hours to be available at the start of a working day on sites a considerable distance away. He gave an assurance, however, that engines would be shut off immediately a unit returned to the depot and that there would be no unnecessary disturbance during maintenance operations which, in any case, are only carried on during normal daytime hours with occasional early evening overtime.

Two other matters dealt with concerned structure-borne noise and vibration from compressors and refrigerator equipment in shops forming the ground floors of tenemental buildings. The complaints were remedied by mounting the units on anti-vibration pads. The airborne noise level was negligible.

In one of several cases relating to noise from pneumatic drills, it was unfortunate for the complainers that the excavations to accommodate under-ground telephone cables were being carried out through solid rock. Despite the use of mufflers on the drills, therefore, the disturbance to the complainers was not inconsiderable. Happily, the excavations were only in progress during normal working hours and the degree of annoyance dropped considerably as soon as the rocky section of the ground had been passed.

A somewhat unique complaint was received from the occupier of a first floor flat that the sound of bagpipes being practised in the living-room of the house below was proving a source of considerable annoyance. The matter was quickly resolved by the player volunteering to change to another room so that the complainer could enjoy the quiet of his living-room in the early evening when the practice sessions took place.

A matter attended to which had a relationship to the problem of noise concerned a timber merchant's premises in a built-up residential area where the noise from the mechanical saws was a cause of considerable annoyance and complaint. An application by the firm for planning permission in terms of the Town and Country Planning (Scotland) Acts to erect a new workshop to accommodate additional machinery was turned down by the Planning Authority and this decision was sustained by the Secretary of State on appeal. A factor which largely influenced the Planning Authority in their decision was the increased noise and disturbance which would result if the additional machinery was installed and put into operation. This point was also made in the dismissal of the appeal by the Secretary of State. The department was required to give evidence on the noise aspect at the public local inquiry in connection with the appeal.

The Food and Drugs (Scotland) Act, 1956, and Statutory Instruments having effect under that Act

Food Inspection

To safeguard the interests and health of the consumer by reducing to a minimum the risk of unsound food being sold, offered or exposed for sale, a long established system is operative in the City whereby the inspectorate of the department, following requests from food traders, are prepared to examine suspect foodstuffs and, where applicable, issue certificates in regard to food found to be unsatisfactory. The certificates state that, on examination, the food was found to be unfit for human consumption and was voluntarily surrendered to the Chief Sanitary Inspector. These certificates are issued to traders only after the foodstuffs have been destroyed under the supervision of the inspectors.

In furtherance of this obligation in relation to the protection of the public, opportunity is also taken to examine foods in warehouses, shops, etc., in the course of visits to these places for other purposes and by so doing a wide coverage of foodstuffs being offered or exposed for sale in the area is achieved.

During the year, 268 requests for examination of foodstuffs were received by the department and, as a result thereof, 1,902 certificates were issued in respect of articles dealt with and destroyed. Details concerning these are set out in the following table, which, incidentally, shows that canned foods are, as usual, the major problem; this, however, is due mainly to damage to containers during transportation and handling rather than to inefficiency in manufacture.

ARTICLES OF FOOD SURRENDERED

ARTICLES	Where Surrendered	Tons	Cwts.	Qrs.	Lbs.	Reasons for Surrender
Bacon	Shops or Wholesale Stores, etc.	—	1	3	18	Decomposition, Contamination, Damage to Containers, etc.
Bacon Fry		—	12	3	—	
Beef		—	9	1	13	
Beef (Tinned)		2	2	—	15	
Butter		—	1	—	12	
Cheese		—	7	2	24	
Chicken (Tinned)		1	—	2	4	
Fish (Tinned)		—	7	2	25	
Flour		—	16	1	—	
Fruit		—	6	1	12	
Fruit (Tinned)		2	9	2	13	
Fruit, etc. Juices		2	1	1	3	
Ham (Tinned)		2	—	1	11	
Ice Cream		—	2	3	8	
Jam, Syrup, etc.		—	1	2	10	
Liver		—	3	2	10	
Milk (Tinned)		—	4	—	6	
Pork (Tinned)		3	1	—	5	
Rice (Tinned)		—	16	2	10	
Soft Drinks		—	3	1	4	
Soup (Tinned)		2	4	3	17	
Tongue (Tinned)		—	18	2	14	
Vegetables		—	2	—	6	
Vegetables (Tinned and Prepacked)		3	4	3	20	
Miscellaneous		—	2	1	17	
TOTAL		24	2	3	25	

Regardless of these protective measures, of course, the year also brought its quota of complaints from members of the public concerning allegations that articles sold to them were found to be unsound, or unfit for human consumption, and investigations under this heading were carried out in response to 109 such complaints. Inquiries relative thereto are extremely involved and time-consuming, consisting as they do of interviewing witnesses, submitting samples for examination or analysis to the bacteriological laboratory or the laboratory of the Public Analyst, the inspection of food stocks, premises, refrigeration equipment, etc., also correspondence with manufacturers, wholesalers and importers.

The sale of food unfit for human consumption is, of course, an extremely serious legal offence, but 99 cases could not be reported to the Procurator Fiscal for the reasons detailed below:—

Complaints not corroborated by the Analysts's report	29
Complaints not corroborated by the Bacteriologist's report	3
Insufficient evidence—no witness to purchase, etc.	17
Where follow-on samples of the food complained of proved genuine	2
Delay in bringing complaint to the Sanitary Department	9
Complaint finalised by complainer returning article to shop for replacement ...	1
Complaints where Analyst's reports, etc. showed that the foreign object complained of was in some way associated with the article of food, e.g. bovine tissue in meat; blood vessels in chicken; edible oil in dough; string from flour bag in roll; liver in chicken; potato skin in fish cake; moth in fruit; cooking marks in bread (Firms, etc. were notified and 6 warnings given)	14
Complaints, concerning imported food, which were notified to the Scottish Home and Health Department	2
Complaints where a warning was considered sufficient after investigation showed that every reasonable precaution had been taken by the seller—e.g. dirty milk bottles	9
Complaints concerning certain foods where a warning was considered sufficient ...	12
Complaint concerning the sale of chicken which was, on investigation, found to be exposed for sale as animal food	1

The remaining 10 cases, however, were all reported to the Procurator Fiscal and the results thereof are categorised below:—

Offenders brought to Court and fined	4
Offender brought to Court and admonished	1
Cases deserted in Court by Procurator Fiscal	2
Cases not presented in Court for various reasons	3

Details of all these cases can be found under the heading "Other Sampling" which appears later in the report.

As has been mentioned in previous Annual Reports, mechanical failures of compressor motors of deep freeze food cabinets and cold rooms, etc. in food premises occur regularly and in view of the resultant dangers which arise from food which has become either wholly or partly unfrozen, prompt attention must be given to such matters when reported. A total of 20 such breakdowns were reported and attended to during the year, one case involving the disposal of 402 lbs. of ox livers.

Occasionally fire damage to food premises is reported with resultant contamination and damage to food by smoke and water. Two premises were affected in this way during 1970. In one case a fairly large quantity of food had to be disposed of but in the second case only minor damage resulted from the fire.

The assistance of the department was sought following water damage to twenty-six 70 lb. multiwall paper sacks of Canadian Flour shipped to this country by container. On arrival at the Dundee depot the examination was carried out under the Imported Food (Scotland) Regulations, 1968, and the flour was diverted for animal feeding.

Surrendered by a firm for destruction were 341 bottles and 34 cans of soft drinks because they contained Cyclamates; cyclamic acid having been removed from the list of permitted artificial sweeteners by the Soft Drinks (Scotland) Amendment Regulations, 1969, with effect from 1st January, 1970.

As a matter of interest the following are some of the other articles of food which had to be destroyed and the reasons therefor:—

13 x 2 lb. packets of sugar contaminated by disinfectant;

3 x $\frac{1}{4}$ lb. packets of tea damaged with cooking oil;

1,428 lbs. in packets of bacon fry affected by mould growth;

56 lbs. Swedish butter which was rancid;

53 dozen x 25 fluid ounce plastic bottles of orange drink which had fermented;

One bottle of tomato ketchup containing glass;

Foodstuffs Arriving at the Port of Dundee

The undernoted foodstuffs arrived at Dundee from foreign parts during the year under review.

	Tons	Cwts.	Qrs.
Fish (Frozen)	188	5	1
Tea	209	15	—
	398	—	1

The Imported Food (Scotland) Regulations, 1968

These Regulations contain measures for the protection of the public health in relation to imported food. Usually the local authority of the port through which the food is imported is the enforcing authority. As it is an offence to import food which is unfit for human consumption, the Regulations specify the procedure to be adopted for the examination of imported food by Authorised Officers of Local Authorities and Port Local Authorities, and for the submission of samples to the Public Analyst.

The modern tendency to transport food cargoes in some form of container which makes for ease of handling, speed in loading and unloading, and the possibility of the food remaining intact from place of manufacture to its ultimate destination, has largely determined the need for this legislation which, inter alia, provides for the inspection of such food at the first point of unpacking of the container, rather than at the port of entry as was formerly the case.

Although all imported food is examined at the port on arrival at Dundee, a small but increasing volume is also now being brought overland by vehicles carrying containers which have been landed at other ports. Since it is imperative that these containers be released as soon as possible, the inspector must call at the premises of delivery at the earliest possible moment after arrival and carry out the necessary examinations, the containers having to remain sealed until opened in his presence.

During the year, 38 visits were made in connection with these Regulations, and as a result of notifications and advice from six different authorities, food, such as onions, wheat flour, red currant juice, apples, prawns, shrimps, chopped ham and pork, honey, butter, orange pulp and carcases of deer meat, was examined at the premises of carriers, manufacturers and wholesale food merchants in the City.

Samples of tea, shrimps and red currant juice were submitted to the Public Analyst for analysis. With the exception of the last mentioned, which is referred to in a later part of the report dealing with informal samples found to be adulterated or irregular, all proved to be genuine.

Slaughterhouses, Meat and Cattle Markets

There are no private slaughterhouses in the City, but the Public Slaughterhouses, etc. come under the jurisdiction of Mr Andrew Spreull, M.R.C.V.S., the Superintendent of Markets and Slaughterhouses, who has kindly supplied the following information relative thereto:—

"

	Number of Animals			
	Slaughtered	Wholly Condemned	Partially Condemned	Weight (in lbs.) of Meat Condemned
Cattle	15,727	29	3,029	20,406
Calves	182	10	9	429
Totals	15,909	39	3,038	20,835
Sheep	33,384	137	3,413	7,129
Pigs	10,204	55	1,716	12,439

The responsibilities of the many and various Acts, Orders and Regulations are all adhered to including the more important Diseases of Animals Acts and the Food (Meat Inspection) (Scotland) Regulations.

There are difficulties attempting to adhere to modern legislation requirements with an establishment of this age but they are at present under review and likely to be brought up to date as soon as conveniently possible.

The routine procedures of inspection are safeguards towards ensuring that all meat foods from this department are satisfactory for human consumption."

Food Sampling

The following table gives comparative information for the last five years concerning the department's sampling activities under the Food and Drugs (Scotland) Act, 1956:—

Year	Number Purchased or Taken	Genuine	Adulterated	Percentage Adulterated
1966	672	624	48	7.14
1967	577	507	70	12.13
1968	372	341	31	8.63
1969	380	332	48	12.63
1970	626	580	46	7.35

The 1970 total of 626 samples consisted of 180 formal samples—that is to say, taken in accordance with the procedure laid down in the Act—and 446 informal (or test) samples, the latter, if found to be not genuine in any way, being followed up by the taking of formal samples in the manner legally prescribed. The respective details are as follows:—

1. Formal samples procured with the possibility of legal proccedings in the event of adulteration or irregularity being found:—

	Number Purchased or Taken	Certified to be	
		Genuine	Adulerated or Irregular
Brandy	1	1	—
Gin	2	2	—
Groceries	38	37	1
Ice Cream	19	19	—
Milk Ice	1	1	—
Milk	2	2	—
Mince	36	26	10
Rum	5	5	—
Sausages	36	32	4
Whisky	40	39	1
	180	164	16

2. Informal Samples:—

	Number Purchased or Taken	Certified to be Genuine	Certified to be Adulerated or Irregular
Baby Foods	7	7	—
Bamboo Shoots	2	2	—
Beer	16	16	—
Bread	2	2	—
Butter	3	3	—
Cakes	2	2	—
Cheese	11	11	—
Chicken-in-Jelly	4	4	—
Chutney	2	2	—
Confectionery	7	7	—
Coffee	2	2	—
Cooking Oil	2	2	—
Cream	6	6	—
Curry Powder	3	3	—
Dried Fruits	2	—	2
Fish and Fish Products	5	5	—
Flour	1	1	—
Fruit	24	24	—
Fruit Juices	3	3	—
Gelatine	2	2	—
Honey	5	5	—
Jams and Fruit Spreads	8	7	1
Meat Pies, etc.	31	29	2
Medicinals	60	60	—
Milk	74	67	7
Milk Puddings	4	4	—
Mince	36	29	7
Pasteurised Eggs	5	5	—
Pie Fillings	3	3	—
Potato Mix and Salad	3	3	—
Rennet Essence and Cochineal Colourings	2	2	—
Salt and Seasonings	6	6	—
Sauces	14	14	—
Sausages	36	28	8
Shandy	5	4	1
Soft Drinks	2	2	—
Soups	17	17	—
Tea	4	4	—
Tinned Fruits	9	9	—
Tinned Meat	4	4	—
Tomato Puree	3	2	1

	Number Purchased or Taken	Certified to be Genuine	Certified to be Adulerated or Irregular
1 Sample each of the following:— Cereal, Horlicks, Pickles, Quail Eggs, Mincemeat, Yoghurt, Meatless Sausalatas, Tomato Spread ...	9	8	1 (Meatless Sausalata)
	446	416	30

With a population of 181,508 this works out at 3.45 samples for every 1,000 persons, compared with 2.09 for 1969, 2.04 for 1968, 3.16 for 1967 and 3.08 for 1966.

In addition to the above, however, a further 610 food samples (detailed later) were obtained for other purposes, namely 173 for chemical analyses and 437 for bacteriological examination; the total figure for 1970 is therefore 1,236, which works out at 6.81 per 1,000 of the population.

Formal Samples Found to be Adulterated or Irregular

Groceries. The contents of a tin of lambs' tongues was found on analysis to contain 80% meat. The Public Analyst thereupon reported that the labelling of this product was misleading in that, although gelatine was listed among the ingredients, the fact that the tongues were contained in jelly was not clearly stated. He was therefore of the opinion that, by virtue of the legislation, the product should either have contained 95% meat or have been labelled "Lambs' Tongues with Jelly". Correspondence resulted in the firm informing the department that in their opinion the method used in the analysis had some bearing on the means of determining the meat content, and their point of view was eventually accepted.

Mince and Sausages. Detailed information concerning samples of these found to be adulterated or irregular is given under the headings "The Preservatives in Food (Scotland) Regulations, 1962" and "The Sausage and Other Meat Product (Scotland) Regulations, 1967".

Whisky. A sample of whisky was found to be below strength stated on the label attached to the bottle from which the whisky was supplied. The circumstances were reported to the Procurator Fiscal but when the case was raised in the Sheriff Court the licence holder was admonished notwithstanding that he pled "Guilty".

Informal Smples Found to be Adulterated or Irregular

Dried fruit. A sample bar of fruit and nut dessert was found on analysis to contain 96 parts per million of sulphur dioxide. The Public Analyst reported that in his opinion the product, although exempt from the need to declare the presence of any preservative, was sold as a health food and that any additives should therefore be declared. The firm, when contacted, stated that they did not themselves add sulphur dioxide but it was not possible to purchase imported dried fruits free from this preservative. Nevertheless, they had already decided to declare the presence of an additive to existing bags and cartons as and when these are re-ordered. They evinced surprise, however, that the Public Analyst considered a product containing sulphur dioxide could not be described as a health food.

A sample bar of fig and brazil was found to contain 60 parts per million of sulphur dioxide. The Public Analyst also reported that in his opinion the product was misleading in that the designation on the label was "Fig and Brazil", while the major constituent was dates, and that although fruit products are exempt from the provisions as to labelling within the regulations, in view of the fact that this is a health food, any additives should be declared. The firm eventually agreed that when re-printing the labels, additives would be declared and that they would alter "Fig and Brazil Bar" to "Date, Fig and Brazil".

Red-currant Juice. A sample of imported red-currant juice taken from a container was found to contain 1,100 parts per million of sulphur dioxide and the Public Analyst reported that this did not conform to the Preservatives in Food (Scotland) Regulations, 1962, in that there were 750 parts per million in excess. It was later discovered, however, that the juice was for manufacturing purposes only, in which case a higher quantity of preservative is allowed. A sample of the finished product taken as red-currant jelly proved to be genuine.

Meat Pies, etc. A sample consisting of three Scottish Pies, revealed on analysis that two did not conform to the Meat Pie and Sausage Roll (Scotland) Regulations, 1967, in that they were deficient in meat content to the extent of 31.5% in each case. A sample of Bridies was deficient in meat content to the extent of 12%.

Formal follow-on samples, however, proved to be genuine.

Milk. Seven samples of milk were found on analysis not to conform with requirements. A sample of Premium Milk and two samples of Pasteurised Milk were deficient in solids-not-fat. One of the Pasteurised Milks mentioned was also deficient in milk fat, as were two samples of Standard Milk. Two samples of Premium Milk contained an antibiotic.

Formal follow-on samples taken in relation to six of these cases proved to be genuine, but in the case concerning the deficient Premium Milk sample, this procedure could not be followed because the milk was produced outwith the City and the local dealer cancelled his order before this could be done.

Mince and Sausages. Detailed information concerning these sample failures is contained in the section of the report headed "The Preservatives in Food (Scotland) Regulations, 1962", and "The Sausage and Other Meat Product (Scotland) Regulations, 1967".

Shandy. A sample was reported by the Public Analyst to have a strength of only 1.2° Proof, being deficient, in his opinion, in alcohol content to the extent of 20%. His recommendation was that products of this type should have a minimum alcohol content of 1.5%. This, of course, was in reference to the standard laid down in the Labelling of Food (Scotland) Regulations, 1970, but the particular section referring to this product does not come into force until 1st January, 1973. The firm's attention, however, was drawn to the matter.

Tomato Puree. A sample submitted to the Public Analyst was reported as having a lead content of 5.2 parts per million which was slightly in excess of the statutory limit of 5 parts per million laid down in the Lead in Food (Scotland) Regulations, 1961. When, however, follow-on samples were taken they were proved to be within the prescribed limit.

Sausalatas (Meatless). The Public Analyst reported in relation to a sample described as "Sausalatas Tasty Meatless Sausages" that since these were contained in a can on which appeared a pictorial representation of three sausages on a plate with scrambled eggs and tomatoes and with the words "Sausalatas" in larger lettering than the words "tasty meatless sausages", and as the Canned Meat Products Regulations define a sausage as being a product of a shape usually known as sausage shape and containing meat with or without cereal and includes chipolata, in his opinion the word "Sausalata" inferred the presence of meat, as it is a combination of the two descriptions, sausage and chipolata, both of which are meat products. He further stated that there was on the label a contradiction in terms. In his opinion, therefore, the labelling of the article was in contravention of Section 6 (1) of the Food and Drugs (Scotland) Act, 1956.

The firm concerned replied that this product had been sold under a coined name since 1956 which carried a general implication of the shape of the article to be found within the can, backed by a suitable illustration. They further stated that the label clearly described the article and misled no one. There is a considerable difference of opinion here and the matter is still under consideration.

Other Sampling

As usual, of course, samples were also submitted to the Public Analyst with other ends in view; for example, opinion on complaints from the public concerning articles of food alleged to be abnormal or to contain foreign matter, fitness for human consumption, etc., determination of the character of mains water drawn from domestic taps in various parts of the City, checks on the quality of water derived from private sources, tests as to the purity of water in public swimming baths and those associated with educational establishments, and so on.

Details of the 191 samples under this heading are as follows:—

		Satisfactory	Unsatisfactory
109	Fitness, etc. of Food and Drink ...	49	60
24	Mains Water	24	—
8	Springs and Wells Water	6	2
50	Swimming Baths Water	50	—
191		129	62

As mentioned earlier in the report, of the 109 complaints received from members of the public regarding unsatisfactory food, only 10 such cases could, for the reasons given, be reported to the Procurator Fiscal, and the following are details relative thereto:—

An iced dairy cream sponge sold from the branch shop of a bakery firm was contaminated by diesel or paraffin hydrocarbons. The firm suggested that the contamination could have been caused by the bakery board having been splashed by oil as it was lying outside the board washing room. The Procurator Fiscal decided that a warning letter from him would suffice in this particular instance.

A souflette sponge bought from a large store was certified to be unfit for human consumption, being badly affected by mould growth. Careless stock rotation was the trouble here so that the sponge was sold after the recommended time limit for sale. The Sheriff imposed a fine of £5 after the firm pled "Guilty".

A general grocer pled "Guilty" to the sale of a beef and mushroom pie which was affected by mould growth and certified to be unfit for human consumption. In extenuation, the grocer claimed that his refrigerator was out of order at the time of sale and that the pie must have been pushed to the back of the cabinet when it was being re-stocked and was thus overlooked. In Court he was fined £5.

A general grocer pled "Guilty" to the sale of a beef and mushroom pie which for human consumption in that it was badly affected by mould growth. In an Information given to the Procurator Fiscal, the grocer was named as the accused. In his statement to the department's inspectors, however, he alleged that the area van salesman of the manufacturing firm actually replenished the trays of the refrigerated counter unit himself, when renewing stock and removing out of date stock. The Procurator Fiscal felt that this could well be a type of case where a defence might be put forward that the fault lies with the suppliers and manufacturers of the food. For this reason, additional information in the form of a signed statement from the van salesman was obtained. In this he admitted that he supplied fresh stock daily, placing it at the back of the refrigerated cabinet, but suggested that in this particular instance, someone must have misplaced the dish of potted meat in such a manner that it was sold as fresh stock. The Procurator Fiscal finally decided that the manufacturing firm could not be held responsible for the actions of their van salesman and that the responsibility really lay with the shopkeeper. He felt, however, that the fact that the case had been reported and investigated would serve as a warning for greater care to be exercised by both parties in the future; and there the case took end.

A case against a grocery firm was deserted when called in Court due to the Company having gone into liquidation. The firm had been charged with the offence of selling pork pies affected by mould growth and certified to be unfit for human consumption. The Managing Director would not accept responsibility for sale. A van salesman of the pie manufacturing firm confirmed that the code mark on the wrapper indicated that the pies had been sold after the expiry date. He could recall being requested to remove two or three pork pies from the premises on the same day that the complainer raised the question of her own unsatisfactory purchase with the shop assistant. The complainer, at that time, noticed the removal of pies from the refrigerator counter by the assistant.

Another case in which two packs of potted meat were sold concerned the same manufacturer who supplied the general grocer in the case referred to earlier. These were purchased from a supermarket and reported by the Public Analyst to be in a state of incipient putrefaction and unfit for human consumption. In the report sent to the Procurator Fiscal, the firm occupying the supermarket was named as the accused but the Procurator Fiscal intimated that if the evidence given by the employees was to be believed, the offence at the highest was merely a technical one. He suggested that it might be more satisfactory to take proceedings against the manufacturing firm and, with this in view, requested further investigation and the submission to him of full statements. After correspondence with the manufacturer it was suggested to the Procurator Fiscal that in view of the information received the action might well be taken against the sellers and it would be then open to them, should they so desire, to plead for transference of responsibility to their suppliers as is provided for under the Food and Drugs (Scotland) Act, 1956. On giving the matter further consideration, the Procurator Fiscal suggested another line of investigation with a view to providing corroborative evidence. As far as possible this was done. Finally, however, the Procurator Fiscal decided against taking proceedings on the ground that he was not satisfied there was sufficient evidence to show that the meat was purchased at the shop in question.

Four "Steaklets" sold in a packet were found to be badly affected with mould growth and unfit for human consumption. The shop manager stated that when he had been on holiday a fortnight previously there had been a refrigerator breakdown following which the proprietor had thrown out most of the affected stock. The "Steaklets" complained of, however, must have been overlooked. A further packet of "Steaklets", also affected by mould growth, was found in the premises when the Inspectors were carrying out their investigations. Information passed to the Procurator Fiscal resulted in the case being brought to Court. The proprietor pled "Guilty" but was admonished.

A butter biscuit sold to a customer in the retail shop of a large bakery was not of the "nature, quality or substance of that demanded" in that it was found to contain the filter tip of a smoked cigarette. A representative stated that the firm was aware of the complaint but that smoking was banned on the premises. It was suggested that the foreign object could have been introduced into the bakehouse in the baking fat. Information given to the Procurator Fiscal resulted in the proprietor being fined £10 after pleading "Guilty" to the offence.

The same firm was also concerned in a complaint where a customer discovered a piece of wire in a morning roll which, he stated, had been purchased from the private shopkeeper of a small mixed grocery business. The complainer contacted the bakery firm personally since he understood that they were the manufacturers of the roll. The proprietor, on hearing of the complaint, offered to indemnify the complainer but the offer was refused. Nothing untoward was discovered at the bakehouse, although metal detecting devices were not in use. On instructions from the Procurator Fiscal, a statement was taken from the shopkeeper who sold the roll and was to the effect that although the rolls were delivered from this bakery he could not identify the person who made the purchase. The Procurator Fiscal decided to abandon proceedings when the case was called in Court on the grounds that the purchaser was not a regular customer and there was no corroborative evidence of sale.

A complaint from the City's School Meals' Organiser led to the examination of a consignment of fish supplied by a local firm. The Public Analyst's report stated that the part of the consignment submitted to him was in a state of decomposition and unfit for human consumption. The Information was reported to the Procurator Fiscal and this resulted in the supplier being brought to Court where he pled "Guilty" and was fined £10.

The foregoing information must, of course, emphasise the complexity of the problem of garnering sufficient evidence of the right sort to enable Court proceedings to go forward with any real hope of success. It also helps to explain the point made earlier in the report to the effect that such enquiries are time-consuming and put a considerable strain on the resources of the department.

The very considerable increase over recent years in the number of complaints having to be dealt with concerning sales of different kinds of foods affected by mould growths is of more than passing interest. Formerly, such complaints mainly related to dairy products, and were less in evidence when standards of hygiene in food premises were lower than they are today. Now that such standards have risen and the premises are so much better equipped, it is more than ever important to look for a reason or reasons. The greater confinement of certain foods (such as pies, bridies, sausage rolls, etc.) in packs and the nature of the packing material used, are strong possibilities, for it is noted that such foods when sold loose are less readily affected by mould, and any such change is more readily detected. It may also, of course, be that the increasing use of refrigerated cabinets brings a false sense of security to shopkeepers and strict stock rotation is thereby neglected. Whatever the reason, there is no suggestion that prepacking of foodstuffs and the use of refrigeration in food premises should be discouraged, for there is no doubt whatever that the benefits derived therefrom far exceed any possible drawbacks. At the end of the day, however, it may well prove to be that the education of the public which has been going on over the years in what to expect and accept under the heading of food hygiene is bearing fruit and that they are now more readily prepared to complain about such matters than they were before.

Samples of foodstuffs, washed milk bottles, waters, etc. were also taken for the purpose of being bacteriologically examined at the laboratories of the University of Dundee, and the following table (which excludes routine milk and ice cream samples because these are statistically mentioned elsewhere) gives details concerning this aspect of sampling:—

	Satisfactory	Fairly Satisfactory	Unsatisfactory
30 Mains Water	29	—	1
48 Swimming Baths Water	47	—	1
14 Spring and Well Water	11	—	3
64 Washed Milk Bottles	51	1	12
30 Milk on Delivery to Dispensing Machines	19	—	11
28 Milk from Dispensing Machines	14	—	14
39 Milk from Polythene Bags	26	—	13
16 Imitation Cream	14	—	2
21 Dairy Cream	14	—	7
1 Liquid Ice Cream Mix	1	—	—
2 Bone Grist	2	—	—
1 Corned Meat	1	—	—
9 Sewer Swabs	9	—	—
5 Shell Fish	5	—	—
14 Milk	8	—	6
1 Coconut	1	—	—
2 Meat Pies	2	—	—
1 Vomit	1	—	—

The results of tests (to check the efficiency of the washing process) on milk bottles taken from dairies after they had been washed and were ready for filling were disappointing, even though there was an improvement on last year's figures, which showed roughly 23% failures compared to 19% this year. The twelve unsatisfactory results involved five premises and in each case investigations were made to attempt to establish cause for failure. It is very difficult and at times impossible, however, to find reasons for these poor results. An excellent example on this point can be found by reference to a pasteuriser who has a good record and whose premises are well equipped with modern machinery. One washed bottle produced evidence of coliform with more than 25,000 colonies as a count of viable organisms, but investigation did not reveal any apparent reason for this, the methods and equipment appearing to be entirely satisfactory. The next washed bottle examined had no coliform but uncountable colonies—again it was not possible to discover a reason. A follow-on sample, when tested, showed positive for coliform but had a greatly reduced count amounting to only 940 colonies. Notwithstanding that this sample bottle failed the test, however, two others taken at the same time and submitted by the pasteuriser to another laboratory conformed to standard. Another washed bottle examined later, proved negative for coliform and produced a count of more than 25,000 colonies. Eventually, of course, the situation cleared itself up and sample bottles which passed the test were obtained, but no definite explanation or reason for the trouble could be given.

Other washed bottle failures investigated were attributed to faulty thermometers, washing machine requiring adjustment, and accidental reduction in the strength of detergent used.

Milk deliveried in churns for use in "Whirlcool" dispensing machines was routinely sampled on delivery to premises to check where responsibility lay when failures in connection with samples taken from these units arose. Eleven such failures were recorded out of a total of 30 samples taken, and all were thoroughly investigated to ascertain, if possible, the cause of the trouble.

By the end of the year, however, all the "Whirlcool" type of dispensing machines in the City had been finally replaced by the more modern "Pergall Pak" unit in which homogenised milk is received on the premises in a sealed polythene pack which is thereafter transferred to a purpose-made refrigerated dispensing cabinet. It was hoped that this type of unit would produce much better results than the "Whirlcool" machine. Unfortunately, 13 samples out of a total of 39 taken for bacteriological examination failed due to the presence of coliforms. All the milk for these units is supplied by two large pasteurisers whose premises are outwith the City, and the necessary follow-up investigations have therefore to be passed on to the outside Sanitary Inspector concerned, who reports back in due course.

One third of the dairy cream samples taken were reported to be bacteriologically unsatisfactory, but this involved only one local pasteuriser, the other creams being supplied by two firms from outwith the City. In one case it was alleged that scrapings from a cream separator had been sent in error to a local dealer. In the cases involving outside authorities the appropriate Sanitary Inspector was notified and requested to carry out the necessary investigations.

Eleven of the fourteen milk samples quoted in the table were submitted to the bacteriological laboratory at the request of the Medical Officer of Health in order that tests might be carried out for the presence of Brucella Abortus. All were produced at dairy premises outwith the City and represented eight Premium Milks and one Premium Jersey Milk. In six of these cases, the Ring Test proved negative but the five other cases gave positive readings and biological tests followed, the results of which were still awaited at the end of the year.

Also tested for the presence of Brucellosis were two Standard Milks taken from a producer whose premises are outwith, but who trades within, the City. In each case the Ring Test was positive. Again, biological tests followed, the results of which are not yet to hand.

Following a request by the Medical Officer of Health, two Premium Milks produced outside of the City were obtained from a local dealer and submitted for examination for the presence of pathogens, particularly S. Typhimurium. In each case, however, the bacteriologist reported that no specific intestinal organisms could be isolated.

The Labelling of Food Order, 1953, and Amending Regulations, 1956/61

This legislation is designed to protect the consumer by requiring that certain pre-packed articles of food and drink shall be labelled in accordance with specific and general rules for the purpose of informing the intending purchaser as to the precise nature of the commodity, the various ingredients of which it is composed, the name of the packer or labeller, and so on.

On 13th August, 1970, the Labelling of Food (Scotland) Regulations, 1970, were promulgated. These will completely supersede the 1953 Order, as amended, on 1st January, 1973. Certain of the Regulations, however, actually came into force during the year under review but, as already indicated, the main provisions do not become operative until 1973.

The principal changes are that the provisions relating to the labelling of pre-packed food for sale by retail and the list of foods to which they apply are amended, as are those relating to pre-packed food sold otherwise than by retail, together with the list of foods to which they apply.

Requirements are imposed as to the labelling of certain foods for sale by retail which are not pre-packed and also as to the advertisement of food for sale from vending machines. Restrictions are imposed on the use of the words "milk", "butter" and "cream" on labels or in advertisements. Restrictions are also imposed on claims based on the value in, or benefit to be derived from, foods, on their ability to provide energy; on their calorie content; or that they are a source of protein. The Regulations also restrict claims as to the presence of vitamins and minerals in food; that foods are starch reduced or can aid slimming, and prohibit claims that foods have specific weight-reducing properties. The Regulations impose restrictions on claims that foods are suitable, or have been specially prepared, for diabetics and on claims that foods have tonic, restorative or medicinal properties.

Provisions are contained in the Regulations as to the labelling and advertisement of acetic acid, chocolate confectionery containing intoxicating liquor, dried and dehydrated food, dry mixes, intoxicating and other liquor, tenderised meat and processed peas, and as to the labelling and advertisement of food as respects flavours.

Finally, the Regulations further promote the provisions which were contained in the Labelling of Food Order, 1953, as amended, as respects the designation of a permitted artificial sweetener when forming an ingredient of some other food during the period from 13th August, 1970 to 31st December, 1970.

Opportunity is always taken by the inspectorate to check for contraventions of the labelling legislation when visits are made to shops, etc. in the course of sampling or examination, etc. of foodstuffs under the Food and Drugs (Scotland) Act, 1956, and during any inspections or visits carried out under other enactments. However, no flagrant breach of the law with regard to misleading descriptions was discovered, most manufacturers nowadays being extremely careful when designing a label to include all the statutory information and avoid all the pitfalls.

Cases which came to the attention of the department during 1970 following the taking of samples under Food and Drugs legislation have already been reported on earlier under the section dealing with formal and informal samples found to be adulterated or irregular.

The Preservatives in Food (Scotland) Regulations, 1962

The addition of chemical substances to food for the purpose of inhibiting or delaying decomposition or other form of deterioration is carefully controlled by these Regulations so that only those known to be harmless or non-toxic, when used in the specified foods in the amounts prescribed, are allowed.

Routine sampling was, as usual, carried out during the year to check compliance with the requirements of the Regulations and the following are details of failures discovered, all, incidentally, relating to mince and sausages:—

Mince. Of the 36 informal samples purchased, seven were found to be in contravention of the Regulations in so far that they contained an excess of preservative (more than 450 parts per million sulphur dioxide) or contained preservative outwith the permitted period of June to September, inclusive; or failed on both counts. All seven cases were followed up by the taking of formal samples, of which only two were found to be genuine. Of the five others, one contained an excess of preservative, two contained preservative outwith the permitted period and two contained an excess of preservative outwith the period. Proceedings were taken against all the offenders and three fines of £5, one of £12 and one of £20 were imposed by the Courts.

Of the twenty-nine other formal samples obtained, three contained preservative outwith the permitted period and one contained an excess of preservative outwith the period. Proceedings were taken against all four offenders and a fine of £5 was imposed in each case.

One other sample was found to contain an additive in contravention of the Meat (Treatment) (Scotland) Regulations, 1964, and proceedings taken against this offender resulted in a £10 fine being imposed.

Sausages. The Regulations permit sulphur dioxide to be added to sausages at any time of the year but, like mince, only to a maximum of 450 parts per million. They also prescribe that the presence of the additive must be made known to the purchaser either by a conspicuous notice suitably displayed within the vendors' premises or on an appropriate label given with the purchase.

Thirty-six informal samples were procured, two being found to contain preservative in excess of the permitted amount and four being in contravention solely on the ground that there was no due notification (two of these, plus two others, were also found to have meat content deficiences, details concerning which are given under the next heading of the report). Formal samples obtained as follow-ons resulted in all being found to comply.

Of the other formal samples obtained, one had an excess of preservative and proceedings in the Sheriff Court resulted in a fine of £5 being imposed on the vendor.

The Sausage and Other Meat Product (Scotland) Regulations, 1967

These Regulations lay down minimum requirements for the composition of meat products, including sausages, and for complete meat products used as ingredients of other meat products, and also specify requirements for the labelling, description and advertisement of such articles of food.

When samples are submitted for test to check compliance with legislation covering the use of preservatives a test for meat content is also carried out. Thereanent, four informal samples of sausages were found to have deficiencies, one in lean meat content and three in lean meat and total meat content.

Formal samples taken as follow-ons resulted in one vendor, who sold sausages deficient in total meat content to the extent of 9.2%, being fined £5, and another being given a warning when it was reported by the Public Analyst that the sausages sold as pork were in fact beef and conformed to the standards for beef.

Of the other formal samples taken, one was found to be deficient in both lean meat and total meat content to the extent of 23% and 7.7% respectively resulting in the vendor being fined £5, while another was deficient in lean meat content to the extent of 13.8%, the vendor in this case being fined £15.

The Ice Cream (Scotland) Regulations, 1948/63

The Food Standards (Ice Cream) (Scotland) Regulations, 1959

The Labelling of Food (Amendment) (Scotland) Regulations, 1959

During the year the undermentioned applications for registration under the Regulations of 1948 were approved by the Local Authority:—

For the Storage and/or Sale of Ice Cream	9
In respect of Vehicles for the Sale of Ice Cream on the Public Streets	2

At the end of the year the register kept in compliance with the Regulations showed the following totals:—

Premises Registered for Manufacture, Storage and/or Sale of Ice Cream	25
Premises Registered for Storage and/or Sale of Ice Cream	68
Vehicles Registered for Manufacture, Storage and/or Sale of Ice Cream	4
Vehicles Registered for Sale of Ice Cream on the Public Streets ...	63

Chemical Analyses: The table in the Food Sampling section of the report which gives details in regard to Formal Sampling shows that nineteen samples of ice cream were obtained and submitted to the Public Analyst. All were found to conform to the standards laid down in the Food Standards (Ice Cream) (Scotland) Regulations, and the following statistical information is taken from the Analyst's reports:—

Fat		Milk Solids-not-Fat	
Under 5%	—	Under 7.5%	—
5% - 6%	3	7.5% - 8.5%	3
6% - 7%	3	8.5% - 9.5%	—
7% - 8%	4	9.5% - 10.5%	3
8% - 9%	4	10.5% - 11.5%	3
9% - 10%	1	11.5% - 12.5%	3
10% - 11%	4	12.5% - 13.5%	2
11% - 12%	—	Over 13.5%	5

Further study of the reports brings out the following:—

	Highest	Lowest	Average
Fat	10.90%	5.10%	8.00%
Milk Solids-not-fat	15.50%	7.53%	11.67%

One sample of Milk Ice was submitted for check and in connection therewith the report on the compositional quality was as follows:—

Milk Fat	Milk Solids-not-Fat
3.5%	8.3%

Milk Ice, incidentally, is required to contain a minimum of 2.5% milk fat (and no other fat present) and 7% milk solids-not-fat.

Bacteriological Examinations: Forty-five samples of ice cream were obtained for this purpose (thirteen being follow-on samples taken after receipt of initial unsatisfactory reports), statistical details on the results thereof being as follows:—

			COLIFORM		
Bacteria Count	No.	Absent	Present in 1 tube	Present in 2 tubes	Present in 3 tubes
0 - 1,000	17	14	2	—	1
1,001 - 2,000	2	1	1	—	—
2,001 - 3,000	3	3	—	—	—
3,001 - 4,000	1	1	—	—	—
4,001 - 5,000	1	1	—	—	—
5,001 - 10,000	3	1	2	—	—
10,001 - 20,000	2	1	—	—	1
20,001 - 30,000	2	1	—	1	—
30,001 - 40,000	2	1	—	1	—
40,001 - 50,000	—	—	—	—	—
50,001 - 60,000	1	1	—	—	—
60,001 - 70,000	1	—	—	—	1
70,001 - 80,000	—	—	—	—	—
80,001 - 90,000	1	—	—	—	1
90,001 - 100,000	—	—	—	—	—
100,001 - 150,000	1	—	—	1	—
150,001 - 200,000	2	1	1	—	—
200,001 - 300,000	1	1	—	—	—
300,001 - 400,000	2	1	—	—	1
400,001 - 500,000	—	—	—	—	—
Over 500,000	3	—	1	—	2
	45	28	7	3	7

The arbitrary standard laid down by D.H.S. Circular No. 82/1960 recommends that ice cream should not contain more than 50,000 bacteria per gram and no coliform bacteria in one-hundredth of a gram, and ice-cream which does not satisfy this standard can reasonably be deemed to have failed because of unhygienic methods used in manufacture, storage or sale.

Reference to the preceding table shows that 16, or 35.6%, failed to measure up to the recommended standard, which is most disappointing when one considers the great amount of attention given by the inspectors to the ice cream trade in the City. Of the manufacturers involved, six only carried out the final process of manufacture in that the liquid mixture supplied to them was simply frozen into ice-cream on the premises.

Examination of the reports of investigations made to establish the cause of each failure revealed that in three cases no sterilising agent was being used to clean equipment and utensils. In two of these instances, after the use of an approved sterilising agent follow-on samples taken were recorded as satisfactory. In the third case, the manufacturer who supplied the dealer from whom the sample was taken discontinued production and follow-up investigative procedure, therefore, was neither possible nor necessary.

Defective equipment was found to be responsible for an unsatisfactory result relative to a sample produced from a cold mix. When this equipment was replaced the follow-on sample proved to be in compliance.

A manufacturer who used cold mix powder and had a good sampling record over the years, even though manufacturing in old premises, supplied an unsatisfactory sample and investigation revealed that neither the premises nor the equipment any longer came up to the high standard necessary for manufacture. Improvements were carried out to both the premises and equipment and a return made to the use of a sterilising agent for cleaning both equipment and utensils. Thereafter, a follow-on sample proved to be satisfactory.

Investigation into the cause of a failed sample from another manufacturer, who had a good record and was usually particularly careful in the cleaning of his equipment, revealed the accumulation of a small amount of milk stone on the agitator paddles. There was no further cause for complaint, however, when a follow-on sample was taken after the efficient use of a chemical milk stone remover on the affected equipment.

A sample procured from still another manufacturer with an excellent record gave rise to an unsatisfactory result but investigation showed equipment, cleaning methods, etc. to be in order. Although the cause of failure was not discovered a follow-on sample conformed to the standards set.

A very strong warning was issued in respect of a sample which failed when it was discovered on investigation that the sample had actually been part of ice cream which had been returned to the manufacturer's premises from one of his vans when the van salesman had failed to sell his full quota. The manufacturer's explanation was that the shop assistant had mistakenly given the sampling officer this ice cream when he asked for the sample without acquainting him with the circumstances; in particular, that it was not intended for sale.

A sample from a dealer who received a pasteurised ice cream mix from a large manufacturer failed and it was suspected that the sterilisation of the scoops might be the trouble. Tests were carried out using two different methods of sterilising and in each case follow-on samples proved to be satisfactory.

Another dealer, who was supplied by the same manufacturer, gave a sample which was adversely reported on and was advised to make use of an approved sterilising agent. The dealer, however, decided instead to discontinue the sale of ice cream.

Investigations into a sample failure from another large manufacturer showed up nothing untoward; even the sterilisation methods appeared to be acceptable. A follow-on sample still failed the tests, but one taken subsequently conformed to the standards.

The time-consuming aspect of this type of work may be gauged from the investigations which had to be carried out and the additional samples which had to be procured as a result of a failed initial sample taken from premises supplied with a pasteurised liquid mix from one of the large manufacturers in the City. The equipment, premises and methods of cleaning appeared to be satisfactory but a follow-on sample also failed. Then, when a sample of the liquid mix taken on delivery failed, investigations at the premises of the large manufacturer revealed an accumulation of sediment on the outlet valve of a pasteurising vat. The cleaning schedule was thereupon changed to include more frequent sterilisation of the valves and other equipment. A follow-on sample taken from the retailer's premises was again recorded as a failure. A further follow-on sample, however, was found to conform.

Vehicles from which ice cream was sold were generally found to be in a satisfactory condition with regard to cleanliness, equipment and methods of handling, and no serious contraventions were recorded during the year under review.

The usual attention was given to the labelling of prepacked ice cream and in every instance the requirements of the Labelling of Food (Amendment) (Scotland) Regulations, 1959, were met.

New legislation introduced during the year included the Ice Cream (Scotland) Regulations, 1970, which were made in August but were not due to come into operation until 4th January, 1971. These Regulations supersede, with amendments, the Food Standards (Ice Cream) (Scotland) Regulations, 1959, and the provisions of the Labelling of Food Order, 1953, as amended, so far as they relate to ice cream. They specify compositional requirements for ice cream and Parev ice, including any ice cream and any Parev ice present as an ingredient of any composite article of food and also specify requirements as to the labelling and advertisement of ice cream.

During the year, 290 visits of inspection were made to premises where ice cream is manufactured, stored and/or sold, and to street-trading vehicles.

The Milk and Dairies (Scotland) Acts, 1914/22

The registers at 31st December, 1970, provide the following statistical information regarding the number of milk traders in the City:—

Producers of Milk	2
Retail Purveyors of Milk (including Producer-Retailers and Bottler-Retailers)	595
comprising:—	
Purveyors of Milk from Shops, Milk-Houses, etc.	556
Purveyors from Vans	18
Purveyors from Vans also licensed in respect of Shops, Milk-Houses, etc.	18
Purveyors resident outwith the City but Registered to Purvey within from Vans	3

The milk produced at the only two dairy farms which remain within the City boundary is directed for pasteurisation, and the number of cows in milk at these farms at the end of the year was 166. The premises were visited on 43 occasions to check that the requirements of the dairy bye-laws, etc. were met, particularly in regard to condition of cattle, byres, equipment and utensils, and methods of production, etc.

In byres exempt from registration under the legislation it was found that at the end of the year only one cow was being accommodated.

A total of 472 visits were paid during the year to other premises included on the register, some of which were in preparation for the Quinquennial licensing in regard to the Milk (Special Designations) Orders.

The Milk and Dairies (Scotland) Order, 1934.

Compliance with the provisions of this Order is checked when other legislation relating to milk is being enforced and nothing untoward was discovered during 1970.

Milk Consumption. The daily direct consumption of milk in the City, so far as can be ascertained, is approximately 17,691 gallons, made up as follows:—

	Gallons
Premium Jersey	10
Premium	478
Standard	70
Pasteurised	17,001
Sterilised	127
Ultra Heat-Treated	5
	17,691
Add to this,	
Milk used in the manufacture of cream, etc.	3,455
TOTAL	21,146

Milk Quality. Two formal and seventy-four informal samples of milk were obtained during 1970 for the purpose of chemical analyses, and the following are details of the average fat and non-fatty solids contents as taken from the Public Analyst's reports:—

Month	Number of Samples	Average Milk Fat	Average Non-Fatty Solids
January	4	3.72	8.60
February	7	3.74	8.76
March	5	3.58	8.74
April	8	3.41	7.80
May	4	3.73	8.96
June	7	4.22	8.94
July	2	3.75	8.61
August	5	3.78	9.09
September	5	3.88	8.86
October	7	4.03	9.13
November	15	4.01	8.92
December	7	4.26	8.76
	76	3.84	8.76

The following information was also obtained from the same source:—

Milk Fat. The highest figure recorded was 5.40% and the lowest 0.70%.* Samples showing a content of 4% and over numbered 25.

Non-Fatty Solids. The highest was 10.38% and the lowest 2%.* Samples containing 9% and over numbered 20.

The statutory minima for genuine milks are:—

Milk Fat: Jersey, Guernsey, South Devon and Channel Islands' Milks	4%
Other Milk	3%
Premium Milk—For "Designation" Purposes only	3.50%
Non-Fatty Solids: All Milks	8.50%

Five samples failed to conform to the Sale of Milk Regulations, 1901, and mention of these has been made earlier in this report under the heading of "Informal Samples Found to be Adulterated or Irregular".

*The exceptionally low figures in respect of the lowest recorded fat and non-fat solids content referred to a sample of Standard Milk which was deficient in fat to the extent of 76.7%, and in solids not-fat to the extent of 76.5%. A formal follow-on sample taken from the same producer proved to be genuine.

The Milk (Special Designations) (Scotland) Orders, 1965/1966

The following licences were in force at the end of the year:—

PRODUCERS OF STANDARD MILK	2
PASTEURISERS OF MILK	4
DEALERS IN PREMIUM MILK	55
do. STANDARD MILK	61
do. PASTEURISED MILK	588
do. STERILISED MILK	293
do. U.H.T. MILK	4

In addition, three dealers possessed supplementary licenses for the sale of Premium Milk from off vans coming into the City.

Two firms in the City ceased to operate during the year, one a pasteuriser and one which pasteurised and also sterilised milk.

The year 1970 brought about a revolution in the local dairy trade by the introduction of the packaging of milk in polythene bags. This momentous happening took place in February after much heart-searching and against the advice of many experts who forecast customer-resistance and quoted failures of other attempts to introduce this type of package elsewhere. In spite of all this, however, a local dairyman decided to venture.

The first packaging and filling machine was rented on a three month trial basis to test customer reaction and three pilot schemes were initiated in different types of districts, one rural, one industrial and the other purely residential. Almost complete acceptance resulted in all areas and within the first month a second machine was ordered; this was installed in May.

To increase production and to enable this to be carried out over a three hour working period, a third machine was installed and in operation by August.

The throughput of each machine is 2,000 pints per hour, and its functions are as follows:—

1. It automatically forms a printed thermo-sealable film into a tube and makes a transverse seal.
2. It injects and doses the milk into the sachets formed.
3. It hermetically seals and cuts the film to a predetermined length.
4. It separates the filled bags.

Sterilization is carried out on the machine by passing the polythene through a bank of ultra-violet germicidal lights immediately before automatic filling.

The machine is cleaned and sterilized by an in-position reverse circulation process.

Bottles continued in use for a period, to use up existing stocks, but by September these were completely dispensed with and the dairy's entire daily production of 2,000 gallons was sold in sachet packs.

The anticipated customer loss due to the change over was expected to be somewhere in the region of 5%, but in actual fact this turned out to be less than 1%.

Some of the advantages of this type of packaging are:—

1. Improved hygiene.
2. Ease of handling and delivery.
3. Space saving.
4. Saving in staff and transport.

It is understood that cost-wise this system is comparable with bottles.

The revolution since then has been spreading because, by December, a second local dairyman had installed his first machine.

When one recalls all that has been written in these reports in past years concerning the many drawbacks of bottles in the dairy industry and the multitude of problems which their use gives rise to, also the many appeals which have been made for the introduction of non-returnable containers because of their public health and other benefits, this sudden change in events is, to say the least, more than welcome, particularly from the point of view of the sanitary profession. The dairymen concerned are to be commended for their enterprise and it is hoped, and expected, that it will be possible to record further advances in this direction in the Annual Report for 1971.

Milk for Bacteriological Examination

The following table relates to samples of Designated Milks submitted to the University of Dundee for examination:—

Designation	Number Taken	Reported as Satisfactory	Reported as Unsatisfactory
Premium Milk	45	13	32
Standard Milk	16	11	5
Pasteurised Milk	125	115	10
Sterilised Milk	3	3	—
Ultra Heat-Treated Milk ...	—	—	—
	189	142	47

Tests on which the samples failed are as follows:—

Designation	Presence of Coliform	Bacteria Count	Phosphatase Test	Coliform and Bacteria Count	Phosphatase and Coliform Tests	Total
Premium Milk ...	13	5	—	14	—	32
Standard Milk ...	2	2	—	1	—	5
Pasteurised Milk ...	8	—	2	—	—	10
Ultra Heat-Treated Milk	—	—	—	—	—	—
	23	7	2	15	—	47

The failures from local sources, however, represented only 6.3% of the total samples submitted because 35 of the 47 failures (32 Premium, 2 Standard and 1 Pasteurised) all came from premises outwith the City.

Sample failures from local sources were duly investigated and defects remedied. Failures in regard to incoming milks were reported to the appropriate outside authorities for investigation.

Non-Designated Milk. The only non-designated milk produced in the City is at one byre which is exempt from registration. One cow is kept and the milk is for the use of the producer and his family.

School Milk. Eighteen samples of Pasteurised Milk supplied to schools in the City were taken for examination. Of these, four were reported as being unsatisfactory and the results relative thereto are included in the foregoing tables.

Antibiotics in Milk

During 1970 the following results were obtained from thirty-two samples examined:—

30, or 93.75%, were found to be free of antibiotics.

1, or 3.12%, was found to contain more than 0.02 international unit of penicillin per millilitre of milk.

1, or 3.12%, was found to contain less than 0.02 international unit of penicillin per millilitre of milk.

The producers of the two milks which gave positive results were from outwith the City and the facts were therefore reported to the appropriate outside authorities in the usual manner.

A maximum of 0.02 international unit of penicillin in 1 millilitre of milk is the arbitrary standard which has been laid down by the Scottish Milk Marketing Board for the purpose of price penalties. Of course, for a milk to be regarded as "Genuine" it should be entirely free of antibiotics.

Milk Vending Machines

Twenty-three licences permitting the sale of Pasteurised Milk from approved coin-operated vending machines were in force during the year, all being under the control of the same person. Two have street sitings and the remainder are installed within factories, offices, a residence hall and a college.

Of thirty-two samples taken from these machines for bacteriological examination, three were found to be unsatisfactory. Follow-on samples in each case, however, complied with the tests.

Six samples were also taken for quality checks and one failed to meet the required standard. Investigation revealed that an agitator in a milk tank was faulty and when this was rectified a follow-on sample was found to be in compliance.

During the year, these machines were made the subjects of special visits of inspection on 38 occasions. They were also, of course, inspected at all times when samples were being procured.

Milk Dispensing Machines

As has already been mentioned elsewhere, the older type of "whirlcool" milk dispensing unit had been completely replaced in the City by the more modern "Pergall Pak" unit by the end of 1970. In this case, homoginised, pasteurised milk is delivered to the premises in sealed polythene packs. These are transferred to a purpose-made refrigerated dispensing cabinet. The seal of a draw-off valve on the pack is subsequently severed, and the customers supplied as necessary.

Details are available under an earlier heading, "Other Sampling", of the results of bacteriological examinations of milk samples obtained from these units; also appropriate comments relative thereto.

New Food Legislation

Information concerning some of the new food legislation which was placed on the Statute Book during the year under review is as follows:—

The Fish and Meat Spreadable Products (Scotland) Regulations, 1970.

These Regulations became operative with effect from 15th March, 1971, and supersede the Food Standards (Fish Paste) Order, 1951. They specify requirements for the description, composition and labelling, and advertisement of meat paste and fish paste, but excluded from the provisions are the products known in Scotland as potted meat, potted hough and potted head.

The Margarine (Scotland) Regulations, 1970.

These are due to come into operation on 4th January, 1971, and supersede previous Orders and Regulations governing compositional standards for margarine (Part IV.A of the Labelling of Food Order, 1953, as amended, dealing with special requirements as to labelling of certain foods, however, continues in operation until 5th July, 1971). The Regulations specify requirements as to fat, water and vitamin content of margarine, and the wording of labels and notices, and restrict the use of the words "butter", "cream" and "milk" on labels and advertisements relating to the sale of margarine.

The Cheese (Scotland) Regulations, 1970.

These became operative on 31st January, 1970, and re-enact the former 1966 Regulations. They also specify new requirements for the composition and description of various kinds of cheese, e.g. hard, soft, whey, and processed, they apply compositional requirements to cheese sold as part of a compound product, specify permitted ingredients, and provide for certain amendments to the labelling and advertisement of cheese and cheese products.

The Coffee and Coffee Product (Scotland) Regulations, 1970.

These Regulations come into operation on 4th January, 1971. They supersede the Food Standard Orders, 1945 and 1952, which, respectively, prescribed standards for Liquid Coffee Essences and Coffee Mixtures. The new Regulations (a) specify compositional requirements for coffee, decaffinated coffee and coffee products; (b) prescribe appropriate designations for decaffinated coffee and coffee products; (c) specify general requirements as to composition, description, labelling, and advertisement, and (d) place restrictions on the use of the words "French coffee" and "Viennese coffee".

The Colouring Matter in Food (Scotland) Amendment Regulations, 1970.

These amend the principal legislation by deleting from the list of permitted colouring matters the substance known as Ponceau MX.

The Emulsifiers and Stabilisers in Food (Scotland) Amendment Regulations, 1970.

These amend the principal Regulations by deleting from the 1st Schedule thereto—Brominated edible vegetable oils.

The Cream (Scotland) Regulations, 1970.

These came into operation on 17th August, 1970, and supersede the Food Standards (Cream) Order, 1951. They specify requirements for the description of cream and its labelling and advertisement. They also specify permitted added ingredients for cream, subject to quantitative limits. Certain requirements relating to description, composition and labelling have modified effect prior to 1st March, 1972.

Food Hygiene (Scotland) Regulations, 1959/1966

The year under review could well be described as another successful period of advancement in the standards of food hygiene throughout the City. When one considers, however, that the Regulations are now eleven years old and that many weaknesses in application and enforcement have revealed themselves in that time, is it too much to hope that the legislation might be brought up to date in the not too distant future to be more in keeping with present day needs and standards.

For example, is it not about time that the provisions relating to the protection of food from contamination be reconsidered. As the Regulations stand at present, it is almost certainly necessary to prove actual contamination, and at the same time a risk to health, for a successful prosecution in the Sheriff Court. It should, for example, and for obvious reasons, be an offence to expose food to a "risk" of contamination.

Should it not now be made a specific offence for a person to smoke in a food room under any circumstances whatsoever.

Is it not possible for the legislation to now be made more definitive in relation to the types of equipment to be used, at least in respect of certain foods, e.g. fish, meat, etc.

Should not the storage temperatures of potentially hazardous foods such as meat, fish, gravy, imitation cream, egg, milk, etc. now be made much more specific and much more stringent, particularly when it is exposed for sale, and should we not now be getting rid of the phrase "a cool ventilated place"—whatever that means.

Furthermore, is it not time to get rid of the phrase "suitable and sufficient", particularly in regard to sinks or other facilities for the washing of food and equipment, and to be much more specific concerning the legislative requirements.

Should the Regulations not be extended to include **all** food premises. For example, they do not appear to apply to the premises of common carriers (where, quite often, large quantities of foodstuffs such as flour, etc. are frequently taken), to premises such as wholesale fish merchants where fish is only temporarily stored prior to distribution and where no preparation or processing takes place, etc., etc.

Several other examples of weaknesses in the Regulations could, of course, be quoted. It may be argued that the generality of the legislation has much to commend it and has achieved a great deal. Against this, however, it should always be remembered that encouragement, exhortation and persuasion are only successful with the receptive and co-operative type of trader. The really difficult cases can only be dealt with by way of clear, specific and strong legislation.

Table of Analysis of Food Hygiene Inspections

Type of Premises	Total No. of Premises	Total No. Gen. Inspections	Total No. Other Inspections
Class A			
Bakehouses	46	291	4
Bakers' Shops	104	218	5
Butchers	106	528	13
Confectioners	106	175	32
Fishmongers	32	66	2
Fried Fish Shops ...	69	180	49
Fruiterers	50	113	5
General Stores	74	191	50
Grocers	304	489	201
Poulterers	2	9	—
Class B			
Boarding Houses ...	20	50	5
Cafes	32	194	36
Canteens	63	256	23
Clubs	54	36	6
Homes	11	32	4
Hotels	24	123	12
Public Houses	142	77	5
Restaurants	32	305	38
School Meals Services ...	78	191	31
Class C			
Poultry Packing Stations	—	—	—
Meat Processing Factories	3	29	4
Other Food Factories ...	11	74	1
Class D			
Vehicles	148	230	—

The above statistical information is on the lines requested by the Scottish Home and Health Department and records that 4,383 visits of inspection covering 1,511 premises were carried out during 1970.

A further 17 Boarding Houses were inspected in connection with their suitability for inclusion in the City's Accommodation List and although these did not have the required number of bedrooms (more than 3) to bring them within the scope of the Regulations they were nevertheless required to meet the same standards before they were approved for this purpose.

A wide variety of relatively minor faults in food-handling, and discrepancies in carrying out the objectives of the Regulations, were usually dealt with by immediate on-the-spot advice to food-handlers or persons in charge, and written intimations to owners were served as necessary requiring specific improvements.

Infringements numbered 1,534, while 1,479 defects or deficiencies were recorded as remedied at the end of the year. The last mentioned figure, however, covers some matters carried forward from 1969.

Complaints lodged at the department concerning food premises numbered 118 and related to:—

Unhygienic Premises	7
Unhygienic Methods	13
Vermin Infestation	14
Choked Drains/W.C.'s/Sinks/Burst Pipes	17
Smell or Fumes	3
Improper Refuse Disposal	38
Poor Ventilation	1
Inadequate Toilet Facilities	2
Unfounded Complaints	23
	118

Although this is a substantial increase compared with the figures for last year, this does not necessarily indicate that more premises were found to be unsatisfactory following the subsequent investigations carried out as a high proportion of the complaints only indirectly involved food premises. For example, the figure in the table relating to improper refuse disposal in most cases referred to unsightly bin stances at the rear of shop premises in various housing schemes which in many cases was caused by vandals; the vermin infestation in most cases was very often only in close proximity or in the area of the shop precincts; and the unfounded complaints represented approximately 19% of the total investigated.

Outside of what has been said and statistically reported, of course, are other matters with a food hygiene element which arise but are in themselves outwith the scope of the Regulations. One or two examples of this are as follows:—

A Corporation house which required a considerable amount of attention before it could be re-let was found to have some 600/700 dirty milk bottles underneath the floor which had to be collected and disposed of; a considerable amount of decayed foodstuffs had to be removed and disposed of from a shop which had remained empty for some time; much time had to be spent investigating the cause of an algal growth in water from a storage tank used as a source of supply by a soft drinks manufacturer; etc., etc.

Bakehouses

Bakehouses on the register at the end of the year numbered 46, sub-divided into:—

Occupied Mechanical Factory Bakehouses	45
Certificated Basement Bakehouses	1

This is only one less than for 1969 but represents the closure of four small bakehouses and the addition of three others.

As has been said before, the larger bakehouses present fewer problems from the point of view of hygiene due, generally, to the use of modern purpose-built premises and contemporary plant and equipment, routine cleaning techniques, and closer supervision of staff. The smaller establishments, on the other hand, because of cramped working and storage areas, frequent lack of capital for modern machinery and occasional lack of knowledge of modern techniques and developments, need much more careful and regular supervision.

The difficulties involved in supervising this particular type of business may be gauged by the fact that no fewer than 291 visits were made to these premises during the year under review, when 158 contraventions were discovered. Although all of these were abated, the position cannot yet be considered satisfactory since the same contraventions are encountered again and again. The service of statutory notices followed by prosecution might be possible were it not for the fact that many of the contraventions in themselves are unworthy of such drastic action (even if they might succeed—which is doubtful) since they do not necessarily lead to contamination of foodstuffs. For example, the comparatively large number of contraventions discovered, related mainly to untidiness, improper use of clothing accommodation, failure to use pallets for the storage of flour, sugar, etc., and insufficient or irregular sweeping and scraping of surplus flour, dough, etc. from machinery and floors. Furthermore, most of the trouble was experienced in the small type of inadequate bakehouse premises, usually consisting of a small clean front shop with bakehouse in the rear, and while all such places have complied initially with the fundamental requirements for such a business, in doing so, storage accommodation and food preparation areas have been reduced considerably. The very nature of this type of business moreover, demands exceptionally high standards in respect of finished surfaces which, to a great extent, have not been achieved, largely because many such premises are rented and located in old tenemental properties. As time goes on, however, this type of small tenement front-cum-back shop bakehouse is slowly disappearing from the scene and with the weaknesses in present legislation this is more than fortunate.

The Food (Preparation and Distribution of Meat) (Scotland) Regulations, 1963

The premises which come within the jurisdiction of this legislation so far as this department's enforcement responsibilities are concerned are all located within the curtilage of the public slaughterhouses and comprise, mainly, the wholesale meat stances and those places where offals are prepared and processed. Cleanliness, hygiene, sterilisation of equipment, storage of refuse, etc. were all given due attention during the usual routine visits by the inspectorate but once again it must be emphasised that great difficulty is experienced in maintaining acceptable standards of hygiene because of the age and structure of the buildings. Complete modernisation is the only answer here, and this is the responsibility of the Corporation.

Vehicles used for the transport of meat by road also came within the scope of certain of the Regulations and special attention had, as usual, to be given to vehicles used by retail butchers for transporting meat from the meat market to their shops. During the year, these were routinely examined and generally found to be up to standard. However, a complaint regarding the way in which raw butcher meat was delivered to a hospital kitchen was investigated by the department. It was alleged that taxis were being used on occasion to carry meat in the boot of the vehicle from a main kitchen to the kitchen in question. After due consultation with the responsible officials, however, a satisfactory alternative was agreed to.

A total of 196 visits of inspection were made in connection with these Regulations.

Shops Act, 1950, and the Shops (Early Closing Days) Act, 1965

A continual process of change goes on in the composition of the retail trade, with new businesses starting up, some closing down or the premises being demolished, and others joining the trend towards mixed trading. All this makes the compilation of records somewhat difficult but, so far as can be ascertained, there were approximately 1,972 businesses in the City at the end of the year which came within the scope of the above legislation, particulars concerning which are as follows:—

Bakers	104
Booksellers	16
Boot and Shoe Dealers ...	66
Brokers	20
Butchers	106
Chemists	55
Coal Dealers	7
Confectioners	106
Cycle and Motor Agents ...	55
Departmental Stores ...	21
Drapers and Outfitters ...	142
Electrical Dealers	44
Fancy Goods and Toys ...	30
Fish Merchants	32
Fruiterers and Florists ...	50
Furnishers	57
Grocers	304
Hairdressers	122
Ironmongers	18
Music and Radio Dealers ...	30
Newsagents and Tobacconists	101
Opticians, Watchmakers, Jewellers	44
Paint and Wallpaper Merchants	57
Pet Stores	8
Publicans	142
Restaurants, Cafes, etc. ...	133
Miscellaneous	102
Total	1,972

The provisions of the Shops Act, 1950 which still remain enforceable relate, in the main, to closing hours, assistants' half-holidays and hours of employment for young persons; the Early Closing Days Act deals with the half-day closing of shops for trading.

The inspectorate continued to require shopkeepers, as necessary, to display a Notice, as required under the last-mentioned Act, at the shop entrance intimating the day chosen as the Early Closing Day.

Only two complaints, both anonymous, were received in 1970. One concerned a draper who was not observing the Early Closing Day requirements. Since the trader was a foreigner and pleaded ignorance of the law he was advised of his obligations. The other concerned a grocer, who it was alleged, was trading outwith the permitted hours and he was warned to adhere to the hours set for his trade.

The usual number of cases discovered by the inspectorate of failures to display Notices and Forms as required under the legislation were satisfactorily dealt with when these matters were drawn to the attention of the traders.

Towards the end of the year, due to approaches made to the Corporation on behalf of traders in terms of Section 1 (4) of the Shops Act, 1950, in respect of six-day trading for a central area of the City, work was started with a view to selecting a particular area within which a referendum might be taken to ascertain the wishes of the shopkeepers regarding this matter. The results thereof will, of course, be reported in due course.

Young Persons Employment Act, 1938

A few enquiries were received during the year in connection with this legislation, in the majority of cases regarding the permitted hours of employment of those young people who are protected by the Act. Two actual complaints, however, were received which required investigation. One concerned a butcher who, it was alleged, had his apprentice working more than the permitted number of hours per week. This complaint was not justified. The other concerned a young kitchen worker who thought that he was working excessive and "awkward" hours. In this case when the hotel management was consulted it was found that the boy in question did not in fact work more than the permitted hours; the "awkward" hours referred to shift work which, although not in contravention of the legislation, had been a temporary arrangement. This was altered to suit the worker.

Offices, Shops and Railway Premises Act, 1963

At the end of the year, the total number of premises registered under this legislation was 2,162, a decrease of 21 on last year's figure of 2,183, brought about mainly because of closure and demolition of the smaller types of retail shop premises in the extensive areas of redevelopment going on within the City.

Change of occupancy, contraction to family businesses, or closure and demolition of premises, resulted in the cancellation of 218 registrations, while only 197 new registrations were recorded. Comparative figures for the year 1969 were 279 and 201 respectively.

No difficulties with regard to registration or enforcement of the general provisions of the Act were encountered and it is clear that frequency of inspections has achieved a marked reduction in the number of infringements. Compared with last year's figure of 1,777, only 664 contraventions were found to exist this year on initial and subsequent inspections of premises.

A comprehensive survey carried out during the last quarter of the year revealed that there existed 697 shop premises which were outwith the scope of the Act, due, in the main, to the exemption in respect of family businesses.

Plans of new buildings and alterations or additions to existing premises were, as usual, carefully scrutinised and measures taken where necessary to ensure compliance with the provisions of the Act and regulations made thereunder.

The following table lists defects or deficiencies found during the year and contraventions, including those occurring in previous years, which have been abated:—

DEFECTS	Contraventions Found on Initial Inspections and Re-survey Visits	Abated
Cleanliness—Lack of	47	67
Overcrowding	2	2
Heating—Inadequate	9	13
—Absence of Thermometer	47	110
Ventilation—Inadequate	29	63
Lighting—Defective or Inadequate	9	23
Sanitary Accommodation—Insufficient	3	12
—Defective	40	126
Washing Facilities—Insufficient	1	5
—Defective	31	50
Drinking Water/Vessels	—	—
Clothing—Lack of Accommodation and/or Drying Facilities	10	17
Sitting Facilities—Insufficient	3	11
—Unsatisfactory	1	—
Eating Facilities	—	—
Floors, Passages, Stairs—Defective	192	337
—Access	22	30
Machinery—Dangerous	13	48
—Warnings	54	92
First-Aid	81	116
O.S.R.9	69	180
Common Parts	1	4
	664	1,356

In addition to the contraventions which were abated after intimations and notices had been served, 529 items were deleted as a result of 218 registrations being cancelled.

The following paragraphs give a brief assessment of the operation of selected provisions of the Act and the Hoists and Lifts Regulations, 1968.

Cleanliness

A high standard of cleanliness was found in office premises, supermarkets and multiple stores. The 47 cases where it was considered necessary to draw the attention of occupiers to unsatisfactory conditions applied to the smaller types of shops.

Temperature and Ventilation

A case of inadequate heating in a costumier's premises formed the subject of a complaint which originated in an order to employees to ensure that the shop door remained open to attract business. When instructed to meet enforceable heating requirements, however, the management immediately rescinded its directive.

A complaint of a different nature was received from employees in a large departmental store of over-heated conditions on a mezzanine floor during the summer months. The construction of partitions on one side of this floor, where previously there had been direct access to several windows, severely restricted ventilation and remedial measures involved the restoration to working order of an existing extractor fan and the provision of suitable ducting.

A few instances were again found where deficient ventilation had arisen from the sealing up of appurtenance windows for reasons of security. In these cases the provision of mechanical ventilation or small permanent vents effected the necessary improvement and met satisfactory standards.

Lighting

Booklet No. 39 on lighting standards has proved an invaluable guide and has on several occasions provided occupiers of premises with essential data when reconstruction or improvement works were being undertaken.

Sanitary Accommodation and Washing Facilities

The construction of intervening ventilated spaces to separate sanitary accommodation from workrooms frequently presented problems, particularly in the smaller shops where space is very limited. The question of whether it is "reasonably practicable" in these instances to construct an intervening space is often a difficult one, and provided adequate privacy exists, a mechanical system of ventilation operating throughout working hours was invariably accepted.

Floors, Passages and Stairs

Defective floors, stairs and floor-coverings, together with obstructed access passages, continued as formerly to constitute the bulk of infringements.

Prosecutions

One prosecution covering offences against six sections of the Act was taken against a shopkeeper who, despite having received warnings and notices, refused to remedy shortcomings in regard to cleanliness of the premises, inadequate sanitary accommodation and washing facilities, obstruction of passageways, lack of stair handrail and the absence of a guard on a conveyor belt. He pleaded "Guilty" on all charges, was fined £25, and ordered to carry out the necessary improvement works within a period of three months.

Accidents

Because of the apparently small number of accidents reported during the previous year it was considered doubtful whether all employers were fully conversant with their obligations under Section 48 of the Act to report the occurrence of notifiable accidents to the appropriate authorities. Opportunity was therefore taken to direct attention to these important provisions by the inclusion in a publication by the local Chamber of Commerce of an article on this subject.

A total of 40 notifiable accidents, all non-fatal, was recorded during the year. All were investigated and in six cases written recommendations were made for precautionary safety measures to be taken in order to prevent or minimise the recurrence of similar mishaps.

The following table gives the classification of accidents by primary cause, with comparable figures for 1969:—

CAUSE	1970 Number	1969 Number
Machinery	—	2
Transport	1	1
Fire or Explosion	—	—
Use of Hand Tools	6	1
Falls of Persons	15	21
Stepping on or striking against object ...	8	3
Handling goods	5	4
Struck by falling object	4	4
Other causes	1	3

For the second successive year, no accidents involving the use of food slicing machinery were reported; most (15) were the result of persons falling, and practically all of these were attributable to carelessness or haste on the part of the victim.

Hoists and Lifts

No difficulties or problems were experienced in administering the Offices, Shops and Railway Premises (Hoists and Lifts) Regulations, 1968, which became operative with effect from 28th May, 1969.

Upon receipt of a copy of an examination report detailing work to be carried out, the owner of the premises in which the lift or hoist is situated is requested to communicate with this department when the necessary repairs have been completed, and where immediate measures are required in order to make the lift safe to use, instructions are given to affix "Out of Order" signs.

During the year copies of reports on the examination of two manually operated service lifts, eight electric passenger and goods lifts, and one mobile crane were received.

Defects included worn suspension ropes, inadequate enclosures, absence of gates at landings and faulty gate interlocking. In every case the premises were re-visited to ensure that the necessary repairs or action had been completed within the period laid down.

Dundee Corporation Orders 1957 and 1969

Under the various sub-headings which follow are reports concerning the administration of the parts of this legislation which are the responsibility of this department.

Hairdressers, Barbers, Ear-piercers and Tattooists

Visits to hairdressing establishments during 1970 were, as usual, mainly in connection with alterations to premises and registrations of new businesses. At the end of the year, 122 such businesses were on the department's register, and these were all found to be conducted hygienically and generally complied with the requirements of the bye-laws. It is also satisfying to record that no complaints were received from members of the public at any time during 1970 regarding lack of hygiene, equipment or any other matter. The advice of the department was frequently sought and given in respect of new premises, or where alterations were to be carried out in existing premises, on matters concerning ventilation, utilisation of floor space, installation of fittings, and so on. In this way, of course, mistakes are often avoided which could have created insurmountable difficulties in completed premises.

In the Annual Report for 1969, reference was made to the extension of the provisions regarding registration to embrace Ear-piercers and Tattooists and it can now be reported that early in 1970 an initial survey was undertaken of certain premises in the City wherein ear-piercing is carried out with a view to determining the conditions, particularly with regard to safety, suitability of premises, and so on, under which such operations are conducted. Details of the sort of instruments used, the methods and practices adopted, the facilities available for sterilisation, etc. were subsequently passed on to the Medical Officer of Health.

During the year, an application for registration was received in respect of premises intended to be used as a tattoo artist's studio. The premises, in their existing condition, were found to be quite unsuitable for this type of business by reason of the absence of facilities for proper washing, sterilising and general preparation procedures. The decision on whether or not to register, however, did not have to be taken because the applicant decided to give up the idea and terminated his lease of the premises.

No other business of this type is being carried on within the City.

Theatres, Cinemas and Dance Halls

As routine during the year, and immediately before the annual renewal of licences, all 38 premises in this category were inspected so far as the interests of this department are concerned (primarily in regard to sanitary accommodation, ventilation and cleanliness) to ensure that they were being satisfactorily maintained and conducted in accordance with local requirements.

Any conditions discovered to which exception had to be taken were promptly and satisfactorily rectified.

Places for Public Refreshment

Cafes, restaurants, tea-rooms, etc. which provide meals and light refreshments (other than intoxicating liquors) after certain evening hours and on Sunday, are required to be registred by the Local Authority in terms of the Orders and are subject to control by bye-laws.

A total of 108 visits were paid to such registered premises and of 31 contraventions discovered all were abated during the year.

Street Traders.

The number of street traders and the manner of their trading is, by virtue of the local Orders, regulated by the Magistrates who issue licences, renewable annually. This measure of control enables the department to ensure that all mobile shops retailing foodstuffs are properly designed and equipped since licences are issued only after the vehicles have been inspected and approved.

Opportunity is taken whenever possible to check on maintenance and other conditions in these mobile shops. In general, a satisfactory standard is achieved.

Conveyance of Waste Food

Contractors removing waste food from restaurants and canteen kitchens, hotels, etc. in the City for the purpose of feeding as swill to pigs must transport the material in suitable covered receptacles or in closed vehicles to secure freedom from odour while the swill is in transit.

On one or two occasions lorries were observed loaded with some uncovered bins containing waste food and the persons in charge were accordingly warned. No actual complaints were received by the department, however, under this heading.

Diseases of Animals (Waste Food) Order, 1957

Waste foods can be the medium whereby foot-and-mouth and other diseases of animals may be spread unless proper precautions are taken by way of boiling the food for a sufficient length of time. This Order therefore prohibits the feeding of unboiled waste foods to certain specified animals or to poultry. It also provides that where a person has collected from the premises of other persons and brought same on to his own premises any waste foods for feeding to animals or poultry, the waste foods shall not be used on or moved from his premises unless they have first been boiled for at least one hour in plant licensed by the local authority.

Six boiler plants at different premises are at present properly licensed by the Corporation for this purpose, but at the end of the year it was found that only three were still in use. At the other three places the stock were being fed on barley meal.

Routine inspections of these plants were carried out at the same time as the usual routine visits to piggeries were being made.

Piggeries. The number of piggeries in the City was reduced to twelve during 1970, and the total number of pigs kept averaged 824.

Routine inspections were carried out to ensure that the premises were maintained in a satisfactory manner and complied with the relevant bye-laws.

Offensive Trades

Nine businesses, detailed hereunder, are on the register of Offensive Trades, all of which, with the exception of one hide factor, are carried on within the precincts of the Public Slaughterhouses.

Gut Cleaners (Private)	1
Hide Factors (Private)	4
Slaughterer of Cattle (Corporation)	1
Tripe Boiler (Corporation)	1
Blood Boiler (Corporation)	1
Tallow Melter (Corporation)	1

With regard to the Tripe Boiler, however, the procedure at the moment is for the tripes to be initially cleaned at the Slaughterhouse. They are then sent to Perth for final cleaning, after which they are returned to Dundee for distribution to the trade.

No complaints were received in connection with these businesses, but the premises were, as usual, inspected periodically throughout the year and found to be reasonably satisfactorily maintained considering the age and construction of the buildings particularly in relation to the Slaughterhouses premises, the reconstruction and modernisation of which are still under consideration.

Pet Animals Act, 1951

The eight premises in the City licensed under this Act were all given the usual routine visits of inspection during the year. It was found that certain unsuitable conditions of a minor character existed at six of the establishments, but these were soon put right on request. At the end of the year, the conditions at all the premises were satisfactory so far as the interests of this department are concerned and it was therefore possible to recommend that all the licences be renewed for another 12 months.

Pharmacy and Poisons Act, 1933

The number of registrations for the sale of Part II Poisons at the end of 1970 had fallen to 65, a reduction of 13 on the previous year's figure, due mainly to the closure of shops in development areas.

All premises were inspected to ensure that storage arrangemets were satisfactory and that the requirements regarding labelling, etc. were being complied with.

Merchandise Marks Acts, 1887-1953, etc.

This legislation is primarily intended to protect home producers and manufacturers against the misrepresentation of certain imported goods, including certain specified foodstuffs, by stipulating that the imported articles be suitably marked denoting the country of origin or the fact that they are foreign.

Although the Trades Description Act, 1968, which came into force on 30th November of the same year, replaced and expanded this form of legislation by dealing with mis-description of goods in general terms, Orders made under Merchandise Marks legislation are not affected for three years from this date so that continued attention to their requirements was still necessary during the year under review. Compliance with the requirements was therefore noted by the inspectorate as a matter of routine, and warnings given where necessary.

Fertilisers and Feeding Stuffs Act, 1926

Twelve samples (seven fertilisers and five feeding stuffs) were taken during the year for the purpose of chemical analysis and the results relative thereto were as follows:—

	Fertilisers	Feeding Stuffs
Samples conforming to guarantee in all respects	4	5
Samples conforming although above the guarantee in one constituent or more and not below in any	1	—
Samples not conforming to guarantee being above or below guarantee in one constituent or more	2	—
	7	5

With reference to the samples which were reported by the Public Analyst as not conforming to the guarantees, one was a sample of dried blood which was deficient in nitrogen to the extent of 1.45%. When the firm supplying the fertiliser was asked to comment on this, they replied that their product had been tested after sampling and found genuine by the local Weights and Measures Department. In support thereof, they enclosed a copy of a certificate of analysis showing this. However, since this Certificate was dated 24th April, 1967, and the non-conforming sample was taken three years later, the question of the effect of prolonged storage on the nitrogen content was raised. The firm replied that it is known that if dried blood is stored in any warm atmosphere this would cause it to give off ammonia with a consequent loss of nitrogen. Since the dealer selling the produce had already stored it for at least one year it was decided that no further action could be taken.

The other non-conforming sample concerned bone meal which was found to contain Phospheric Acid in excess of the guarantee to the extent of 3.2%. The Public Analyst reported, however, that this would have no adverse effect on plant life and the matter was not taken further.

Rag Flock and Other Filling Materials Act, 1951, etc.

The eleven premises registered for the use of rag flock and other filling materials and the factory licensed for the storage of rag flock were all inspected during the year and found to be satisfactory.

Four informal samples were taken under the Act as follows:—

Rag Flock —1
Woollen Felt —1
Woollen Flock—2

All were reported to comply with the standard laid down in the Rag Flock and Other Filling Materials Regulations, 1961 and 1965.

Port Health

The number of ships arriving at the Port of Dundee from foreign countri showed an increase of 42 from the previous year but with a decrease in tonnage. This increase would appear to be mainly due to a greater number of ships going up river to Perth after clearance at Dundee.

Coastal shipping showed little change from the previous year but with an increase in tonnage, this increase being due to the greater number of oil tankers using the port.

Volume of Shipping Entering the Port

		No.	Tonnage
1.	Foreign	296	215,971
2.	Coastwise	360	268,389

Details of Foreign Shipping

No. of Ships 296

Coming From

Free Ports		Infected Ports	
Direct	Indirect	Direct	Indirect
243	Nil	26	27

Number carrying Deratting Certificates	Nil
Number carrying Deratting Exemption Certificates ...	295
Number with no Certificate	1*

*1 yacht

Inspections. Detailed routine inspections were carried out on all vessels arriving at the harbour from foreign ports. Coastal shipping was also given attention as necessary. Nuisances discovered totalled 127, abatement being secured in the majority of cases prior to the vessels departure. In certain instances where remedial measures were not possible, arrangements were made for the necessary work to be undertaken at the next port of call, or, in the case of larger vessels, when dry docking.

Special attention was given to crew's quarters, messrooms, galleys, pantries, food stores and sanitary accommodation to determine their cleanliness, state of repair and freedom from vermin. The standards of cleanliness and repair were found to be generally good, no evidence of bugs, fleas or lice being detected.

Several cockroach infestations, however, were found in galleys, food stores and crew's quarters of the larger vessels coming from ports in India and Pakistan. Eradicative measures were always promptly carried out during the vessel's stay in port apart from certain extreme cases where arrangements were made to have the ships thoroughly fumigated at the ports of final discharge.

Food stores and larders were found to be clean and well maintained. No necessity arose for the seizure of any foodstuffs but there were one or two cases where weavil affected flour in sacks was voluntarily surrendered on inspection as unfit for human consumption. As in previous years, the most common fault found was lack of attention to the proper defrosting of refrigerators.

Deratting. All foreign ships were subjected to inspection for rodent infestation and eradicative measures taken as required. Three large infestations were discovered. In one instance poisoning was carried out while the vessel was in port and arrangements made for thorough fumigation at the port of final discharge.

The two other infestations related to the same ship on successive visits from Pakistan; despite being thoroughly fumigated during the first visit. The master of the ship was severely warned on the importance of enforcing stricter precautions to safeguard against any further trouble of this nature. The provision of Rat Guards on the mooring ropes of all ships is insisted upon while the vessels are in harbour in Dundee.

Deratting Exemption Certificates were issued in respect of 22 vessels which, after inspection, were found to qualify for such.

Coastal shipping coming within the scope of the Prevention of Damage by Pests (Application to Shipping) Order, 1951, was visited as opportunity arose and found to be clean and free from vermin at all times. Hardly any such vessels now carry a Rodent Control Certificate, preference being given to the International Certificate to cover the possibility of voyages to foreign ports.

Water Supplies. The equipment used for taking on water was regularly inspected and always found to be clean and in good repair. In 14 cases storage tanks for drinking water were cleaned and cement washed prior to refilling. As in the previous year, over two million gallons of water were provided for ships' use whilst in port.

Sampling. Four samples of Indian Tea procured and submitted to the Public Analyst proved to be genuine.

Samples of desiccated coconut, bone grist and crushed bone submitted for bacteriological examination were found to be satisfactory.

A large consignment of foreign shrimps and prawns were off-loaded at the port for onward transportation in refrigerated vehicles to various towns in England. Five samples of different gradings were sent for bacteriological examination and the consignment held in cold storage until the results were proved satisfactory. Clearance certificates were then issued, and the refrigerated vehicles were inspected and found to meet the standards necessary to comply with the requirements of the Food Hygiene Regulations.

A temporary quarantine station was established during the year at Camperdown Dock to cater for the importation of Simmental cattle brought to this country from the Continent for Scottish Farms. The cattle spent 28 days in the quarantine station, which was set up by the conversion of two large sheds at the dock. Specific alterations and improvements were made to the sheds to secure proper standards of heating, lighting, ventilation, etc.; they were also proofed against the admission of rats, mice and birds. The station was under the direct control of the Ministry of Agriculture, Fisheries and Food, and water supply, food and bedding sufficient for the whole period was provided before the quarantine began.

The following is a statistical summary of the work at the port for 1970:—

Table of Inspections, etc.

Total Number of Verbal Intimations		127
Number of Visits to Ships		498
Number of Ships from Infected Ports (direct)		26
Number of Ships from Infected Ports (indirect)		27
Number of Ships from Free Ports (direct)		243
Number of Ships from Free Ports (indirect)		Nil
Total Number of Ships from Foreign Ports		296
Nuisances and Defects attended to		127
Comprising:—		
Forecastles Cleaned	15	
Messrooms Cleaned	14	
Storerooms Cleaned	18	
Choked or Defective Water Closets	14	
Dirty Wash-Basins	14	
Discharge of Foul Water on Quay	11	
Dirty Bedding (crew)	—	
Choked Scuppers	12	
Dirty Lockers	11	
Ventilators Obstructed	8	
Excessive Smoke Emission	10	

In addition the Following Work was Carried Out while the Vessels were in Port

Freshwater Tanks Cleaned Out	14
Forecastles Painted	10
Bathrooms or Wash Places Painted	11
Crews' Messrooms Painted	12
Crews' Living Quarters Painted	12
Water Closet Apartments Painted	23
Bilges Emptied	44

(A)

Number of Vessels Subjected to Measures of Rat Destruction	3
On Ships—No. of dead rats recovered	56
No. of rats examined bacteriologically	Nil
On Shore—No. of rats destroyed other than on ships	285
No. of rats examined bacteriologically	Nil

Species of rats discovered:—

On Ships—Black 38; Brown or Grey 18.
On shore—Black 96; Brown or Grey 189.

(B)

No. of vessels fumigated by SO_2	Nil
No. of vessels fumigated by HCN	Nil
No. of dead rats recovered	Nil
No. of vessels on which poisoning was employed	3
No. of dead rats recovered	56
Deratting Certificates Issued	Nil
Deratting Exemption Certificates Issued	22

General Prosecutions

Summarised below are the results of the 28 cases (details elsewhere in this report) sent to the Procurator Fiscal with a view to action being taken against the offenders in the Sheriff Court.

Offence	Legislation Contravened	Result of Action
Emission of Dark Smoke.	Clean Air Act, 1968, Section 1(1)	Fined £3.
Sanitary Convenience not separated from work-room by means of an intervening ventilated space.	Factories Act, 1961, Section 7 The Sanitary Accommodation Regulations, 1938, Regulation 5	Found Not Guilty.
Preservative in Mince outwith the permitted period.	Preservatives in Food (Scotland) Regulations, 1962, Regulation 4(1)(a)	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £20.
Excess Preservative in Mince.	do.	Fined £12.
Excess Preservative in Sausages.	do.	Fined £5.
Ascorbic Acid in Mince.	The Meat (Treatment) (Scotland) Regulations, 1964, Regulation 4	Fined £10.
Sausages deficient in Meat Content.	The Sausage and Other Meat Product (Scotland) Regulations, 1967	Fined £5.
do.	do.	Fined £5.
do.	do.	Fined £15.
Whisky sold below strength stated on label.	Food and Drugs (Scotland) Act, 1956, Section 6(1)	Admonished.
Sale of Contaminated Cream Sponge.	Food and Drugs (Scotland) Act, 1956, Section 8(1)	Warning Letter from Procurator Fiscal.

Offence	Legislation Contravened	Result of Action
Sale of Mouldy Cream Sponge.	Food and Drugs (Scotland) Act, 1956, Section 8(1)	Fined £5.
Sale of Mouldy Beef and Mushroom Pie.	do.	Fined £5.
Sale of Mouldy Steaklets.	do.	Admonished.
Sale of Fish unfit for Human Consumption.	do.	Fined £10.
Sale of Mouldy Potted Meat.	do.	Case withdrawn by Procurator Fiscal.
do.	do.	Case withdrawn by Procurator Fiscal.
Sale of Mouldy Pork Pies.	do.	Case Deserted in Court by Procurator Fiscal.
Sale of Butter Biscuit containing cigarette filter tip.	Food and Drugs (Scotland) Act, 1956, Section 2(1)	Fined £10.
Sale of Morning Roll containing piece of wire.	do.	Case Deserted in Court by Procurator Fiscal.
Failure to carry out specified works within shop premises.	Offices, Shops and Railway Premises Act, 1963, Sections 4, 9, 10, 16, 17 and 50, and the Sanitary Conveniences Regulations, 1964, The Washing Facilities Regulations, 1964, and The Information to Employees Regulations, 1965.	Fined £25.